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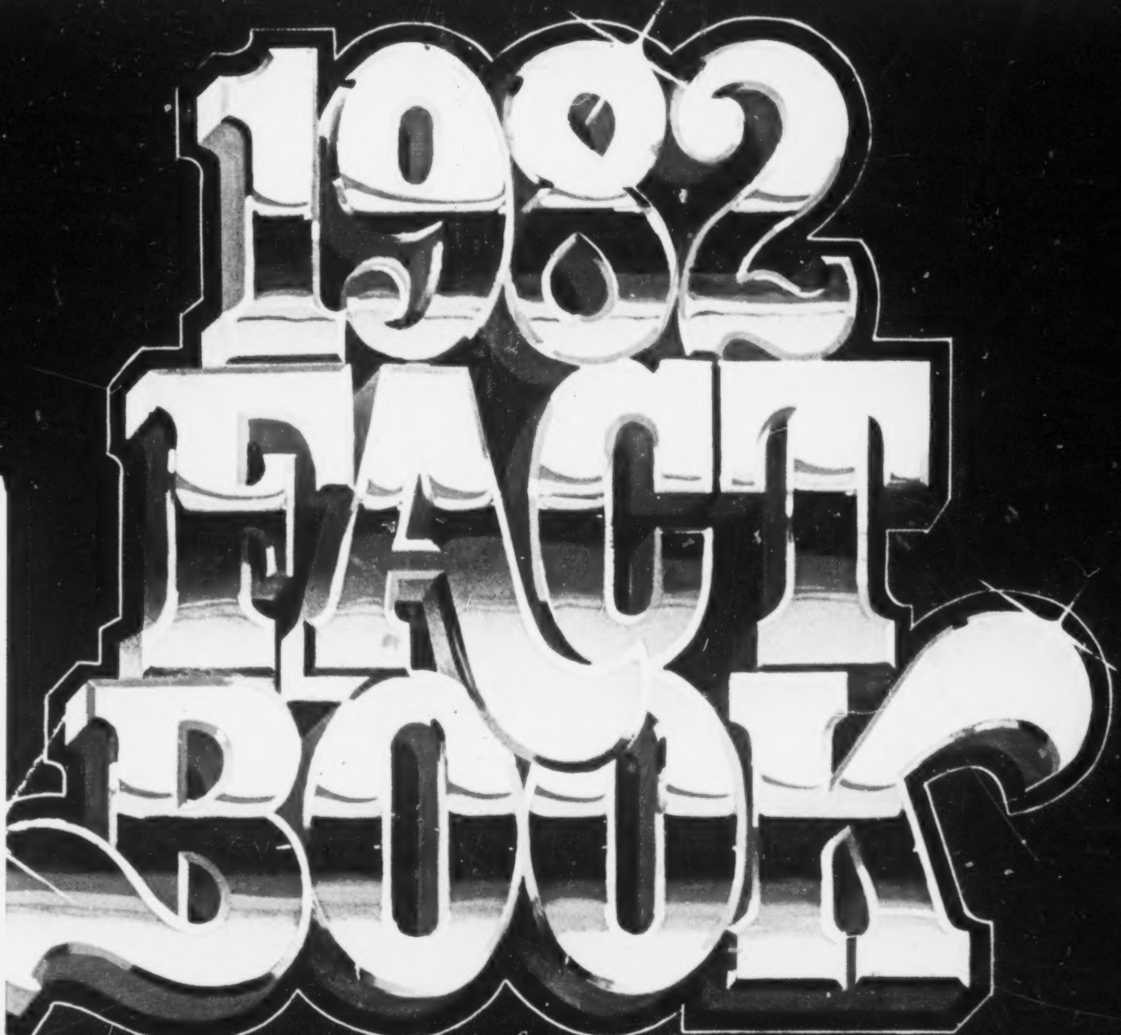

1982 FACT BOOK

Executive Data Including:

- Company-by-company distribution
- Retail outlet networks
- TBA/aftermarket & Service Bay data
- New Jobber Profile
- C-store trends
- Key management listings
- Refinery directory

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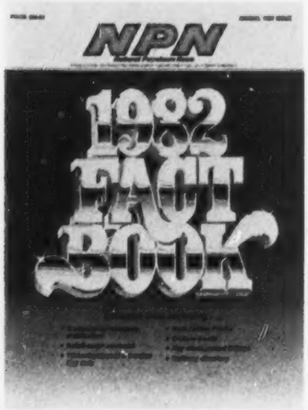

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Ranking The Top Marketing Companies

Marketplace retrenchments that had been expected to follow swiftly in the wake of gasoline decontrol in January 1981 didn't quite live up to their advance billings. Most oil companies proceeded cautiously, confounding critics who had been weeping and wailing that the world would all but come to an end if free enterprise returned to the oil marketing industry. As a result, there was some minor shifting in asset values and rankings but not enough to make much of a dent in the traditional standings.

The rankings of the companies *(right)* is on an assets basis. The top 22 have at least $1-billion worth of facilities and resources. Significantly, Conoco was dropped from the current standings because it was absorbed by DuPont Co. in a 1981 merger and no longer reports its earnings on an independent basis. Marathon is probably on the list for the last time too inasmuch as it was taken over by U.S. Steel Corp. earlier this year and is now a division of that firm.

Otherwise, despite eroding prices and moderate retrenchments, 1981 was another year of billionaires, i.e., oil companies that made at least $1-billion in their 1981 earnings.

Exxon again led the pack with a net of $5.6-billion. Others, in descending order, were Mobil, with $2.4-billion; Standard of California, $2.3-billion; Texaco, $2.3-billion; Standard of Ohio, $1.9-billion; Standard of Indiana, $1.9-billion; Shell, $1.7-billion; Atlantic Richfield, $1.6-billion; Gulf, $1.2-billion; Sun, $1.0-billion.

All but Sun had been members of the 1980 billionaires club. Phillips, which earned a bit more than $1.0-billion in 1980, dropped out of the running for the time being. Conoco also made a billion in 1980 but was eliminated by the DuPont acquisition in 1981.

Forecasts for 1982 indicate that not only will consumption decline again but prices and margins will too. This could mean that the 1982 nets will be materially below those of 1981. And again, it could mean that the borderline members of the billionaires club won't be able to retain their esoteric rankings in 1982.

For a while in late 1981, it appeared that the second flight of independent oil companies might be merger targets of the larger companies. Mobil, for example, went after both Conoco and Marathon but lost not only the bidding wars but also the court scuffles over the legality of the moves. Industry sources thought that if Mobil had been successful, it could have opened the doors for all sorts of acquisition maneuvers by major oil companies and non-oil companies seeking diversification.

	Total Assets		Net Income		Net Sales Ranking Among 500 U.S. Corporations (a)	
	1981	1980	1981	1980	1981	1980
Exxon Corp.	1	1	1	1	1	1
Mobil Oil Corp.	2	2	2	2	2	2
Texaco Inc.	3	3	4	3	4	4
Standard of California	4	4	3	4	5	5
Standard Oil (Indiana)	5	5	6	5	7	9
Gulf Oil Corp.	6	6	9	9	9	7
Shell Oil Corp.	7	7	7	8	13	12
Atlantic Richfield Co.	8	8	8	7	10	11
Standard Oil Co. (Ohio)	9	9	5	6	21	23
Sun Co.	10	10	10	14	17	18
Phillips Petroleum Co.	11	11	11	10	15	16
Getty Corp.	12	12	12	13	23	26
Union Oil Co. of California	13	13	13	15	27	28
Amerada-Hess Corp.	14	14	16	16	33	43
Cities Service Co.	15	15	22	17	39	44
Marathon Oil Co.	16	16	14	18	36	39
Tenneco Oil Co.	17	17	20	12	16 (c)	17 (c)
Ashland Oil, Inc. (b)	18	18	19	19	35	40
Kerr-McGee Corp.	19	19	17	21	101	105
Diamond-Shamrock	20	20	15	20	112	119
Murphy Oil Corp.	21	21	18	22	167	188
American Petrofina Co.	22	22	21	23	164	178

Note: Conoco has been dropped from this report because it was merged into DuPont Co. as a division in 1981.
(a) As ranked by Fortune's 500 leading companies, May, 1981; (b) Fiscal ends Sept. 30; (c) Corporate but includes Tenneco Oil as a division.
Source: NPN questionnaires, annual reports and Fortune.

1980-1979 Changes in Profits

Industry Medians	% Increase
Petroleum refining	25.4%
Mining, crude oil production	45.4
Metal manufacturing	−7.6
Aerospace	6.5
Paper, fiber & wood products	−11.4
Office equipment (inc. computers)	14.2

(Petroleum refining ranked second in 1980 with its 25.4% increase; it ranked first in 1979 with a 78.3% increase.)

Return on Sales

Industry Medians	% Growth 1980	% Growth 1979
Mining, crude oil production	9.2%	8.7%
Pharmaceuticals	9.1	8.9
Tobacco	7.9	7.7
Measuring, scientific, photographic equipment	6.9	6.9
Broadcasting & motion pictures	6.5	8.3
Publishing, printing	6.2	8.2
Office equipment (inc. computers)	6.0	7.0
All industries	**4.8**	**5.2**

(Petroleum refining ranked 9th with 5.5% in 1980, and 8th in 1978 with 6.6%.)

Return on Stockholders' Equity

Industry Medians	% Growth 1980	% Growth 1979
Mining, crude oil production	21.0%	16.7%
Tobacco	19.8	18.4
Petroleum refining	19.4	19.1
Broadcasting & motion pictures	18.0	22.2
Pharmaceuticals	17.9	18.0
Measuring, scientific, photographic equipment	17.1	16.1
All industries	**14.4**	**15.9**

(Petroleum refining ranked 3rd in 1979.)

Source: Fortune 500 largest companies report, May, 1981.

Oil Company Annual

Company (b)	Gross Sales-Operating Revenues (a) (Add 000) 1981	Gross Sales-Operating Revenues (a) (Add 000) 1980	% Change 1981	% Change 1980 vs. 1976	Net Income (Add 000) 1981	Net Income (Add 000) 1980
Amerada Hess Corp.	$ 9,433,630	$ 7,955,000	18.7%	138.9%	$ 212,591	$ 540,242
American Petrofina	2,504,038	2,098,464	19.3	133.9	74,140	104,279
Ashland Oil (c)	9,506,000	8,366,00	13.6	118.6	90,000	205,000
Atlantic Richfield Co.	28,208,000	24,156,000	16.8	233.3	1,671,000	1,651,000
Cities Service Co.	8,564,000	7,442,000	15.1	116.0	(49,200)	477,500
Diamond Shamrock Corp.	1,867,692	1,691,442	10.4	37.7	308,362	280,770
Exxon Corp.	115,148,321	110,380,629	4.3	139.3	5,567,500	5,650,100
Getty Oil Corp.	13,252,000	10,437,000	27.0	333.2	856,865	871,866
Gulf Oil Corp.	30,461,000	28,808,000	5.7	85.1	1,231,000	1,407,000
Kerr-McGee Corp.	3,826,400	3,477,900	10.0	95.9	211,117	182,223
Marathon Oil Co.	9,301,165	8,262,922	12.6	141.2	343,659	379,016
Mobil Oil Corp. (d)	64,488,000	59,510,000	8.4	178.9	2,433,000	2,813,000
Murphy Oil Corp.	2,446,823	1,966,722	24.4	148.2	163,006	150,447
Phillips Petroleum Co.	16,288,000	13,717,000	18.7	179.0	879,000	1,070,000
Shell Oil Co.	21,629,000	19,830,000	9.1	134.3	1,701,000	1,542,000
Standard Oil Co. of California	46,609,000	42,919,000	8.6	139.8	2,380,000	2,401,000
Standard Oil Co. (Indiana)	31,729,000	27,832,000	14.0	175.1	1,922,000	1,915,000
Standard Oil Co. of Ohio	13,810,000	11,346,000	21.7	373.6	1,947,000	1,811,224
Sun Co.	15,967,000	13,242,000	20.6	196.4	1,076,000	723,000
Tenneco (e)	15,462,000	13,226,000	16.9	NA	813,000	726,000
Texaco, Inc. (f)	57,628,000	51,196,000	12.6	117.9	2,310,000	2,240,000
Union Oil Co. of California	10,745,900	9,984,100	7.6	100.8	791,400	647,000

Company	Product Imports b/d 1981	Product Imports b/d 1980	Crude Imports b/d 1981	Crude Imports b/d 1980	Net Crude Production b/d Domestic 1981	Net Crude Production b/d Domestic 1980	Net Crude Production b/d Foreign 1981	Net Crude Production b/d Foreign 1980
Amerada Hess Corp.	—	—	—	—	82,357	88,305	73,745	101,899
American Petrofina	—	0	4,000	27,000	18,036	18,162	—	—
Ashland Oil	—	—	166,000	255,621	2,800	3,100	9,500	9,600
Atlantic Richfield Co.	—	500	—	158,500	539,900	555,700	32,800	33,600
Cities Service Co.	0	0	NA	71,698	149,100	154,700	30,100	32,100
Diamond Shamrock Corp.	—	0	—	1,615	30,287	29,730	33	39
Exxon Corp.	NA	280,800	NA	475,000	752,000	787,000	3,044,000	3,221,000
Getty Oil Corp.	—	0	—	111,800	277,700	271,000	145,900	145,400
Gulf Oil Corp.	21,600	16,400	245,700	332,000	345,400	364,200	269,400	279,800
Kerr-McGee Corp.	—	—	NA	59,811	33,827	32,613	NA	8,233
Marathon Oil Co.	—	0	167,000	215,000	165,874	168,275	64,912	116,521
Mobil Oil Corp.	10,000	12,000	136,000	293,000	316,000	318,000	274,000	466,000
Murphy Oil Corp.	—	245	26,671	42,353	13,992	18,032	47,577	41,651
Phillips Petroleum Co.	—	—	—	123,000	268,000	270,000	141,000	180,000
Shell Oil Co.	—	15,000	256,000	277,000	514,000	511,000	23,000	21,000
Standard Oil Co. of California	NA	NA	NA	NA	378,000	373,000	2,435,000	2,636,000
Standard Oil Co. (Indiana)	NA	19,000	NA	328,000	437,000	464,000	357,000	372,000
Standard Oil Co. of Ohio	—	2,734	—	260,171	717,291	715,784	0	0
Sun Co.	—	—	—	—	217,321	206,107	27,433	28,637
Tenneco Oil Co.	—	—	—	—	83,101	72,526	NA	NA
Texaco, Inc.	—	—	—	—	381,000	413,000	2,672,000	2,760,000
Union Oil Co. of California	NA	NA	NA	135,700	165,800	171,200	70,300	79,300

(a) Excluding taxes.

(b) Clark Oil & Refining was acquired by Apex Oil Co. and Conoco Inc. was acquired by DuPont in 1981 and now are operating divisions instead of separate entities, thus current data are not comparable with past tables. Commonwealth Oil & Refining also was dropped from the 1981 report because of a paucity of data.

(c) Ashland's fiscal year ends 9/30.

Reports for 1981

Net Income		Net Income as % of Gross Sales		Total Assets				Net Income as % of average stockholder equity	
% Change				(Add 000)		% Change			
1981	1976	1981	1980	1981	1980	1981 vs 1980	1981 vs 1976	1981	1980
-60.6%	39.3%	2.3%	6.8%	6,321,581	5,895,444	7.2%	128.0%	8.5%	22.9%
-28.9	73.7	3.0	5.0	1,146,081	1,187,752	3.5	37.5	14.2	22.4
-56.1	(33.8)	9.5	2.5	4,097,000	3,358,000	7.8	94.7	9.3	22.6
1.2	190.6	5.9	6.8	19,733,000	16,605,000	18.8	122.9	19.3	22.2
—	—	—	6.4	6,048,500	5,538,000	9.2	67.3	—	18.5
9.8	120.2	16.5	16.6	3,016,385	2,895,457	4.2	103.6	22.8	21.1
-2.0	110.8	4.8	5.1	62,931,000	56,757,000	10.9	73.2	19.5	22.2
-1.5	231.5	6.5	8.4	9,536,365	8,266,676	15.4	162.8	17.9	21.0
-12.5	50.9	4.0	4.9	20,429,000	18,638,000	9.6	51.9	12.4	14.6
15.9	57.4	5.5	5.2	3,414,904	2,806,559	21.6	110.0	14.1	13.8
-9.3	75.5	3.5	4.4	5,993,623	5,043,092	18.8	97.0	17.2	21.0
-13.5	159.7	3.8	4.7	34,776,000	32,705,000	6.3	119.3	17.6	23.9
8.3	233.3	6.7	7.7	2,776,881	2,308,329	20.1	92.2	22.1	25.8
-21.7	113.3	5.4	8.0	11,264,000	9,844,000	14.4	122.2	16.0	23.8
10.3	140.9	7.9	7.8	20,118,000	17,615,000	14.2	156.7	21.0	22.0
-1.0	170.5	5.1	5.6	23,680,000	22,162,000	6.8	72.0	18.7	21.7
—	115.2	6.1	6.9	22,916,000	20,167,000	13.6	104.4	18.0	20.4
7.5	685.4	14.1	16.0	15,743,000	12,080,050	30.2	151.5	32.7	39.7
40.8	202.2	6.7	5.5	11,822,000	11,000,000	7.5	144.5	23.1	17.9
10.6	—	5.3	5.5	16,808,000	13,853,000	21.3	—	16.1	17.4
3.1	165.5	4.0	4.4	27,489,000	26,430,000	4.0	51.1	17.6	19.7
22.3	194.1	7.4	6.5	7,592,800	6,772,100	12.1	79.6	20.8	20.1

Refinery Crude Runs b/d				Total domestic production as % of total domestic runs		Domestic refined petroleum product sales b/d	
Domestic		Foreign					
1981	1980	1981	1980	1981	1980	1981	1980
414,000	481,000	—	—	19.9%	18.4%	515,000	550,000
97,663	128,301	—	—	18.5	14.2	121,479	137,625
321,499	363,427	—	—	51.6	70.3	428,465	497,748
662,700	727,400	—	6,900	81.5	76.4	647,500	702,500
208,800	237,700	—	—	71.6	65.1	249,100	270,900
59,475	56,985	—	—	51.0	52.0	83,595	83,232
1,111,000	1,246,000	2,767,000	2,923,000	67.7	63.2	1,295,000	1,503,000
249,200	249,100	16,700	20,300	89.7	91.9	285,800	289,300
649,300	749,200	483,300	636,100	53.2	48.6	691,100	736,900
110,524	112,726	—	—	30.6	28.9	149,984	167,637
382,372	414,660	40,261	55,861	43.4	40.6	457,690	463,733
639,000	734,000	1,134,000	1,225,000	49.0	43.0	696,000	737,000
82,790	91,000	24,393	8,428	16.9	19.8	91,215	92,430
285,000	262,000	—	—	94.0	103.1	446,000	460,000
867,000	902,000	—	—	59.0	57.0	826,000	922,000
1,079,000	1,181,000	909,000	1,005,000	35.0	31.6	1,141,000	1,255,000
944,000	1,042,000	NA	160,000	39.2	44.5	831,000	957,000
362,012	400,900	0	0	198.1	178.5	378,430	414,510
382,709	438,927	76,678	78,841	56.8	47.0	477,388	543,679
98,836	91,311	142,034	125,899	84.0	29.1	142,034	125,899
836,000	902,000	1,375,000	1,631,000	45.6	45.8	901,000	980,000
372,400	391,500	—	—	44.5	43.7	365,300	421,700

(d) Mobil's 1980 earnings exclude an extraordinary gain of $459-million.

(e) Tenneco's financial data are corporate, or which Tenneco Oil co. is only a part.

(f) Texaco's 1980 earnings exclude an extraordinary credit of $402-million.

Source: NPN questionnaire and oil company annual reports.

Quarterly and Full Year Earnings—1981 vs. 1980

(Add 000,000)

	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	Full Year 1981	Full Year 1980	% Change
Exxon Corp.	$1,600.0	$1,825.0	$1,075.0	$1,065.0	$5,565.0	$5,650.0	(1.5%)
Mobil Oil Corp.	640.0	700.0	506.0	588.0	2,434.0	2,813.0	(13.5)
Texaco Inc.	658.0	555.7	589.7	507.0	2,310.4	2,240.0	3.0
Standard Oil Co. of California	666.0	616.0	527.0	571.0	2,380.0	2,400.0	(1.0)
Standard Oil (Indiana)	376.7	552.8	608.3	384.0	1,921.8	1,915.3	—
Gulf Oil Corp.	303.0	311.0	316.0	301.0	1,231.0	1,140.0	7.9
Shell Oil Corp.	361.0	410.0	471.0	458.0	1,700.0	1,500.0	13.3
Atlantic Richfield Co.	346.4	380.1	433.5	469.8	1,671.3	1,651.4	1.2
Standard Oil Co. (Ohio)	520.4	478.7	470.0	477.8	1,946.9	1,811.0	7.4
Sun Co.	120.0	298.0	210.0	488.0	1,076.0	723.0	48.8
Phillips Petroleum Co.	270.8	229.8	192.3	186.5	897.4	1,069.6	(17.9)
Getty Corp.	230.2	205.0	205.2	216.5	856.9	871.7	(1.7)
Union Oil Co. of California	154.4	207.9	193.0	236.0	791.4	647.0	22.3
Amerada Hess Corp.	174.5	(53.7)	43.6	48.2	212.6	540.2	(60.6)
Cities Service Co.	57.7	90.5	77.6	(275.0)	(49.2)	477.5	—
Marathon Oil Co.	69.8	86.6	146.6	40.1	341.3	379.0	(9.5)
Ashland, Inc.*	20.2	7.2	13.3	49.3	90.0	205.1	(56.1)
Kerr-McGee Corp.	43.4	51.4	50.3	66.0	211.1	182.2	15.9
Diamond-Shamrock	51.1	(43.9)	54.4	59.7	121.3	201.2	(39.7)
Murphy Oil Corp.	38.4	45.0	41.1	41.4	165.9	150.5	10.2
American Petrofina	20.0	15.3	21.7	17.0	74.1	104.3	(29.0)

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*Fiscal year ends 9/30

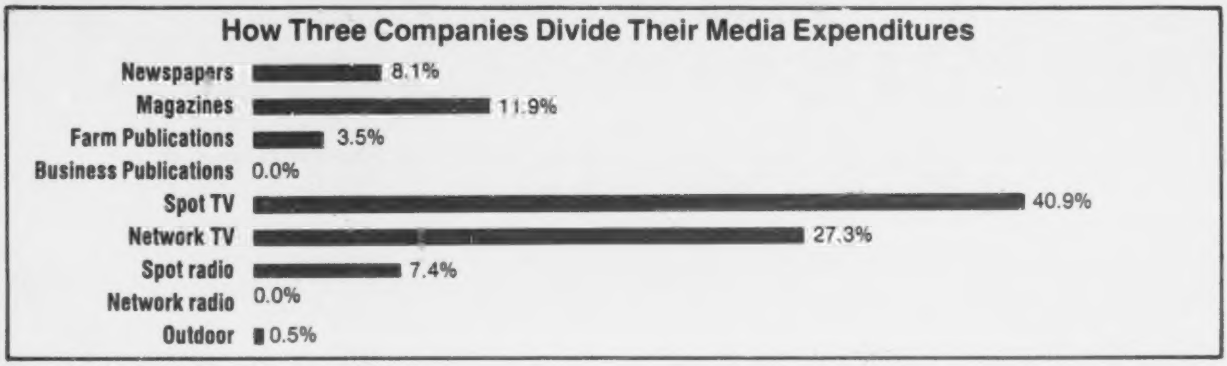
How They Fared in 1980 vs. 1979

(Add 000,000)

Company	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	Full Year 1980	Full Year 1979	% Change
Exxon Corp.	$1,925.0	$1,030.0	$1,355.0	$1,350.0	$5,660.0	$4,295.0	31.8%
Texaco Inc.	1,102.9	502.9	636.4	500.3	2,642.5	1,759.1	50.2
Mobil Oil Corp	1,381.0	688.0	721.0	565.0	3,228.0	2,007.0	60.8
Standard Oil Co. of California	627.0	535.0	624.0	615.0	2,400.0	1,785.0	34.5
Gulf Oil Corp.	389.0	470.0	244.0	304.0	1,410.0	1,320.0	6.8
Standard Oil Co. (Ind.)	576.0	488.2	448.9	402.0	1,915.3	1,506.6	27.1
Atlantic Richfield Co.	426.1	438.8	389.7	398.3	1,651.4	1,165.9	41.6
Shell Oil Co.	373.0	407.0	353.0	408.6	1,541.6	1,125.6	36.9
Standard Oil Co. (Ohio)	450.7	451.3	433.4	475.8	1,811.2	1,186.1	52.7
Conoco, Inc.	328.6	249.6	207.4	241.0	1,026.0	815.0	25.9
Phillips Petroleum Co.	388.6	214.8	283.4	287.0	1,070.0	891.0	20.1
Sun Co. (a)	251.3	247.0	194.9	29.6	772.0	699.9	10.4
Union Oil Co. of California	152.9	194.8	122.0	177.2	647.0	500.6	29.2
Getty Oil Co.	225.8	243.1	191.8	211.1	871.9	604.4	44.2
Cities Service Co.	170.1	107.0	92.6	107.8	477.5	347.5	37.4
Marathon Oil Co.	139.1	108.3	76.3	55.3	379.0	232.2	17.3
Amerada Hess Corp.	199.0	140.4	94.3	106.6	540.2	507.1	6.5
Ashland Oil Co. (b)	75.9	47.4	46.5	35.3	205.1	526.3	(61.0)
Kerr-McGee Co.	47.1	49.6	33.7	51.8	182.2	160.0	13.9
Diamond-Shamrock Co.	56.2	56.3	42.7	45.9	201.2	178.1	13.0
Murphy Oil Corp.	28.4	36.5	40.0	45.6	150.5	103.6	45.3
American Petrofina, Inc.	31.4	25.1	28.4	19.3	104.3	83.2	25.4

(a) Includes Sunmark & Sun Petroleum Products Co; (b) Fiscal ends 9/30.
Source: Annual Reports and NPN questionnaires.

How Oil Spends Its Ad Money



How Three Companies Divide Their Media Expenditures

Source: Advertising Age, top 100 companies for 1979 and NPN estimates.

How Three Top Oil Companies Split Their Budgets (a)

(Add 000)

	Mobil (b)		Exxon		Shell	
	1980	1979	1978	1977	1978	1977
Newspapers	$ 5,923	$ 5,775	$ 1,958	$ 1,822	$ 751	$ 644
Magazines	2,747	3,994	5,179	4,920	4,706	4,772
Farm Publications	1,915	1,995	188	120	2,000	2,225
Business Publications	—	—	—	—	(c)	(c)
Spot TV	33,118	36,932	6,804	3,820	3,491	2,657
Network TV	8,666	5,771	12,668	15,769	7,659	10,906
Spot Radio	2,873	2,183	4,022	2,392	947	338
Network Radio	—	—	—	—	36	635
Outdoor	135	148	442	328	2	44
Total Measured	**$ 55,377**	**$ 56,740**	**$31,261**	**$29,171**	**$19,592**	**$22,224**
Unmeasured	**139,440**	**109,101**	**6,739**	**6,100**	**—**	**4,576**
Total Estimated	**$194,817**	**$165,841**	**$38,000**	**$35,271**	**$19,592**	**$26,800**

(a) Neither Exxon nor Shell made the list of the nation's top 100 advertisers in 1979 nor 1980; hence the only comparable data available are the 1978 figures for these two companies versus Mobil's 1980 data; (b) Mobil data includes Montgomery Ward and Container Corp. of America, which account for about 82% of the total advertising budget; (c) About $500,000 in business publications' advertising is included in the general magazine budget.

Source: Advertising Age, top 100 advertisers in 1980; Shell's budget for 1978 was estimated on an Ad Age basis.

Network TV Investments

Company	1981 Spending (Add 000)	1980 Spending (Add 000)	% Change
Exxon	$20,577	$ 9,591	114.5%
Texaco	12,016	11,631	3.3
Phillips	8,780	8,630	1.7
Conoco	7,075	5,110	38.5
Shell	6,145	7,689	-19.6
Pennzoil	5,833	5,764	1.2
Sun	5,367	2,029	164.5

Company	1981 Spending (Add 000)	1980 Spending (Add 000)	% Change
Atlantic Richfield	3,946	10,758	-63.3
Ashland	3,190	3,123	2.1
Quaker State	3,068	3,108	-1.3
Witco (Kendall)	820	NA	—
Stand. of California	227	NA	—
Gulf	205	NA	—

Source: BAR, from Television Bureau of Advertising, April 1982.

Spot TV Investments

Company	1981 Spending (Add 000)	1980 Spending (Add 000)	% Change
Standard Oil (Ind.)	$11,631	$8,080	43.9%
Gulf	9,624	6,385	50.7
Mobil	8,993	3,291	173.3
Standard Oil of Calif.	8,518	5,558	53.3
Shell	7,416	3,558	108.4
Exxon	6,223	4,410	41.1
Union Oil of Calif.	4,291	2,497	71.8
Texaco	3,746	1,746	114.5
Getty	3,202	NA	—

Company	1981 Spending (Add 000)	1980 Spending (Add 000)	% Change
Burmah Oil	2,856	2,223	28.5
Pennzoil	2,522	931	170.9
Phillips	2,092	980	113.5
Ashland	2,069	NA	—
Quaker State	2,054	1,524	34.8
Sun	1,799	1,796	—
Atlantic Richfield	746	3,297	-77.4
Witco (Kendall)	681	NA	—
Conoco	429	NA	—

Source: BAR, from Television Bureau of Advertising, April 1982.

Current Automotive Registrations (a)

State	Automobiles Registered 1980	Automobiles Estimated 1981	Automobiles % Inc.	Trucks and Buses Registered 1980	Trucks and Buses Estimated 1981	Trucks and Buses % Inc.	All Motor Vehicles Registered 1980	All Motor Vehicles Estimated 1981	All Motor Vehicles % Inc.	Motorcycles Estimated 1981
Alabama	2,105,546	2,140,000	1.6%	832,562	886,000	6.4%	2,938,108	3,026,000	3.0%	78,000
Alaska	156,000	158,000	1.3	99,000	101,000	2.0	255,000	259,000	1.6	8,000
Arizona	1,372,742	1,458,000	6.2	544,011	589,000	8.3	1,916,753	2,047,000	6.8	102,000
Arkansas	1,036,456	1,072,000	3.4	537,262	558,000	3.9	1,573,718	1,630,000	3.6	36,000
California	13,268,006	14,019,000	5.7	3,605,111	3,725,000	3.3	16,873,117	17,744,000	5.2	761,000
Colorado	1,739,718	1,765,000	1.5	602,575	605,000	0.4	2,342,293	2,370,000	1.2	115,000
Connecticut	1,984,064	2,022,000	1.9	163,431	167,000	2.2	2,147,495	2,189,000	1.9	75,000
Delaware	321,644	324,000	0.7	75,483	78,000	3.3	397,127	402,000	1.2	12,000
Dist. of Col.	247,137	257,000	4.0	20,428	22,000	7.7	267,565	279,000	4.3	5,000
Florida	6,196,637	6,398,000	3.2	1,416,902	1,484,000	4.7	7,613,539	7,882,000	3.5	222,000
Georgia	2,932,464	2,938,000	0.2	885,974	912,000	2.9	3,818,438	3,850,000	0.8	114,000
Hawaii	514,509	525,000	2.0	55,293	57,000	3.1	569,802	582,000	2.1	7,000
Idaho	513,256	531,000	3.5	320,812	330,000	2.9	834,068	861,000	3.2	61,000
Illinois	6,240,460	6,390,000	2.4	1,236,372	1,250,000	1.1	7,476,832	7,640,000	2.2	328,000
Indiana	2,872,006	2,900,000	1.0	953,846	959,000	0.5	3,825,852	3,859,000	0.9	190,000
Iowa	1,678,976	1,670,000	–.4	650,489	661,000	1.6	2,329,465	2,331,000	0.1	233,000
Kansas	1,387,847	1,404,000	1.2	619,021	634,000	2.4	2,006,868	2,038,000	1.6	110,000
Kentucky	1,807,358	1,813,000	0.3	785,356	791,000	0.7	2,592,714	2,604,000	0.4	66,000
Louisiana	1,968,041	2,016,000	2.4	811,416	847,000	4.4	2,779,457	2,863,000	3.0	81,000
Maine	518,079	525,000	1.3	205,533	219,000	6.6	723,612	744,000	2.8	50,000
Maryland	2,345,047	2,393,000	2.0	457,849	464,000	1.3	2,802,896	2,857,000	1.9	84,000
Massachusetts	3,289,836	3,320,000	0.9	459,407	489,000	6.4	3,749,243	3,809,000	1.6	113,000
Michigan	5,246,057	5,326,000	1.5	1,242.013	1,256,000	1.1	6,488,070	6,582,000	1.4	258,000
Minnesota	2,314,444	2,345,000	1.3	776,682	797,000	2.6	3,091,126	3,142,000	1.6	171,000
Mississippi	1,219,147	1,269,000	4.1	357,627	366,000	2.3	1,576,774	1,635,000	3.7	30,000
Missouri	2,432,407	2,447,000	0.6	838,879	846,000	0.8	3,271,286	3,293,000	0.7	112,000
Montana	419,700	455,000	8.4	259,832	268,000	3.1	679,532	723,000	6.4	36,000
Nebraska	835,644	849,000	1.6	418,451	431,000	3.0	1,254,095	1,280,000	2.1	87,000
Nevada	471,593	492,000	4.3	183,074	195,000	6.5	654,667	687,000	4.9	21,000
New Hampshire	593,996	604,000	1.7	110,271	120,000	8.8	704,267	724,000	2.8	43,000
New Jersey	4,256,753	4,360,000	2.4	504,604	511,000	1.3	4,761,357	4,871,000	2.3	109,000
New Mexico	686,626	702,000	2.2	381,109	395,000	3.6	1,067,735	1,097,000	2.7	55,000
New York	6,994,316	6,978,000	–.1	1,007,230	1,010,000	0.3	8,001,546	7,988,000	–.1	218,000
North Carolina	3,395,784	3,421,000	0.7	1,136,064	1,196,000	5.3	4,531,848	4,617,000	1.9	122,000
North Dakota	364,909	370,000	1.4	262,023	268,000	2.3	626,932	638,000	1.8	32,000
Ohio	6,415,046	6,536,000	1.9	1,356,190	1,454,000	7.2	7,771,236	7,990,000	2.8	283,000
Oklahoma	1,807,643	1,844,000	2.0	875,356	885,000	1.1	2,682,999	2,729,000	1.7	133,000
Oregon	1,538,556	1,579,000	2.6	542,051	548,000	1.1	2,080,607	2,127,000	2.2	95,000
Pennsylvania	5,821,025	5,897,000	1.3	1,104,830	1,234,000	11.7	6,925,855	7,131,000	3.0	215,000
Rhode Island	542,462	557,000	2.7	80,466	83,000	3.1	622,928	640,000	2.7	27,000
South Carolina	1,533,081	1,541,000	0.5	462,912	479,000	3.5	1,995,993	2,020,000	1.2	43,000
South Dakota	369,549	371,000	0.4	231,692	237,000	2.3	601,241	608,000	1.1	38,000
Tennessee	2,564,551	2,597,000	1.3	706,794	738,000	4.4	3,271,345	3,335,000	1.9	65,000
Texas	7,484,817	7,606,000	1.6	2,989,999	3,161,000	6.4	10,474,816	10,787,000	3.0	331,000
Utah	678,027	682,000	0.6	314,468	318,000	1.1	992,495	1,000,000	0.8	65,000
Vermont	270,287	280,000	3.6	77,036	80,000	3.8	347,323	360,000	3.6	29,000
Virginia	3,071,878	3,137,000	2.1	554,402	567,000	2.3	3,626,280	3,704,000	2.1	91,000
Washington	2,293,521	2,344,000	2.2	931,741	962,000	3.2	3,225,262	3,306,000	2.5	153,000
West Virginia	928,962	978,000	5.3	390,953	406,000	3.8	1,319,915	1,384,000	4.9	43,000
Wisconsin	2,399,134	2,449,000	2.1	541,777	568,000	4.8	2,940,911	3,017,000	2.6	176,000
Wyoming	277,906	282,000	1.5	189,383	197,000	4.0	467,289	479,000	2.5	23,000
Total	**121,723,650**	**124,336,000**	**2.1%**	**34,166,042**	**35,424,000**	**3.7%**	**155,889,692**	**159,760,000**	**2.5%**	**5,972,000**

(a) These estimates were made by the Federal Highway Administration on the basis of state reports of vehicle registrations in the early months of 1981 and information available on current trends, vehicle production, and other factors. They include both privately owned and publicly owned vehicles except those owned by the military services. Registrations shown for 1980 are from table MV-1, 1980.

Estimated Licensed Drivers, By Sex and Population—1980

Women drivers outnumber male drivers in three states and in two others are so close that it will take only a modest increase to tilt them into the female column in 1981, according to Federal Highway Administration's annual statistical book.

States where distaff drivers predominate are Connecticut, New Mexico and Utah. States in the 50-50 category are Massachusetts and Oklahoma. For the nation as a whole, 53.13% of the registered drivers are men. Ohio leads them all with a male registration of 60.43%.

State	Male Drivers	Female Drivers	Total Drivers	% Male Drivers	Per 1,000 Total Population	Per 1,000 Driving Age Population
Alabama	1,190,787	1,080,706	2,271,493	52.42%	584	769
Alaska	125,661	95,339	221,000	56.86	551	754
Arizona	1,049,638	883,683	1,933,321	54.29	711	933
Arkansas	732,150	706,550	1,468,700	51.89	642	842
California	8,324,839	7,343,892	15,668,731	53.13	662	846
Colorado	1,065,361	983,048	2,048,409	52.01	709	917
Connecticut	1,068,726	1,105,756	2,174,482	49.15	700	884
Delaware	215,615	201,847	417,462	51.65	702	902
Dist. of Col.	187,881	156,161	344,042	54.61	539	655
Florida	3,795,101	3,472,861	7,267,962	52.22	746	924
Georgia	1,788,088	1,635,581	3,423,669	52.23	627	828
Hawaii	301,569	239,974	541,543	55.69	561	733
Idaho	332,394	298,614	631,008	52.68	668	917
Illinois	3,723,113	3,279,436	7,002,549	53.17	613	795
Indiana	1,877,220	1,754,237	3,631,457	51.69	661	868
Iowa	1,108,044	998,564	2,106,608	52.60	723	937
Kansas	860,417	815,021	1,675,438	51.35	709	912
Kentucky	1,106,264	949,033	2,055,297	53.83	561	737
Louisiana	1,185,208	1,074,209	2,259,417	52.46	537	723
Maine	381,751	348,142	729,893	52.30	649	841
Maryland	1,427,068	1,294,541	2,721,609	52.43	646	826
Massachusetts	1,830,053	1,810,149	3,640,202	50.27	635	798
Michigan	3,340,992	3,059,008	6,400,000	52.20	691	908
Minnesota	1,221,802	1,114,133	2,335,935	52.30	573	744
Mississippi	856,792	730,219	1,587,011	53.99	630	853
Missouri	1,689,794	1,554,950	3,244,744	52.08	660	848
Montana	332,550	266,432	598,982	55.52	761	1,000
Nebraska	569,594	523,661	1,093,255	52.10	696	905
Nevada	334,082	291,591	625,673	53.40	783	999
New Hampshire	341,605	310,806	652,411	52.36	708	915
New Jersey	2,595,142	2,332,767	4,927,909	52.66	669	852
New Mexico	418,736	435,826	854,562	49.00	657	887
New York	5,186,731	4,053,328	9,240,059	56.13	526	668
North Carolina	1,963,049	1,814,018	3,777,067	51.97	643	832
North Dakota	220,698	198,060	418,758	52.70	641	841
Ohio	4,249,026	2,782,402	7,031,428	60.43	651	847
Oklahoma	994,578	970,571	1,965,149	50.61	650	843
Oregon	1,062,830	927,859	1,990,689	53.39	756	974
Pennsylvania	3,795,479	3,260,989	7,056,468	53.79	595	752
Rhode Island	305,037	281,600	586,637	52.00	619	777
South Carolina	1,024,420	928,410	1,952,830	52.46	626	827
South Dakota	252,236	228,542	480,778	52.46	697	916
Tennessee	1,462,791	1,346,864	2,809,655	52.06	612	793
Texas	4,882,888	4,404,938	9,287,826	52.57	653	867
Utah	422,302	422,415	844,717	49.99	578	846
Vermont	181,490	162,310	343,800	52.79	671	870
Virginia	1,765,461	1,695,225	3,460,686	51.01	647	830
Washington	1,409,882	1,252,776	2,662,658	52.95	645	831
West Virginia	854,459	651,942	1,506,401	56.72	773	1,008
Wisconsin	1,560,969	1,421,397	2,982,366	52.34	634	824
Wyoming	188,044	158,206	346,250	54.31	735	992
Total	**77,190,407**	**68,108,589**	**145,298,996**	**53.13%**	**641**	**829**

Source: Federal Highway Administration, Table DL-IA, September, 1981

Passenger Cars: Oil, Automotive Trends

Fuel and Oil Consumption

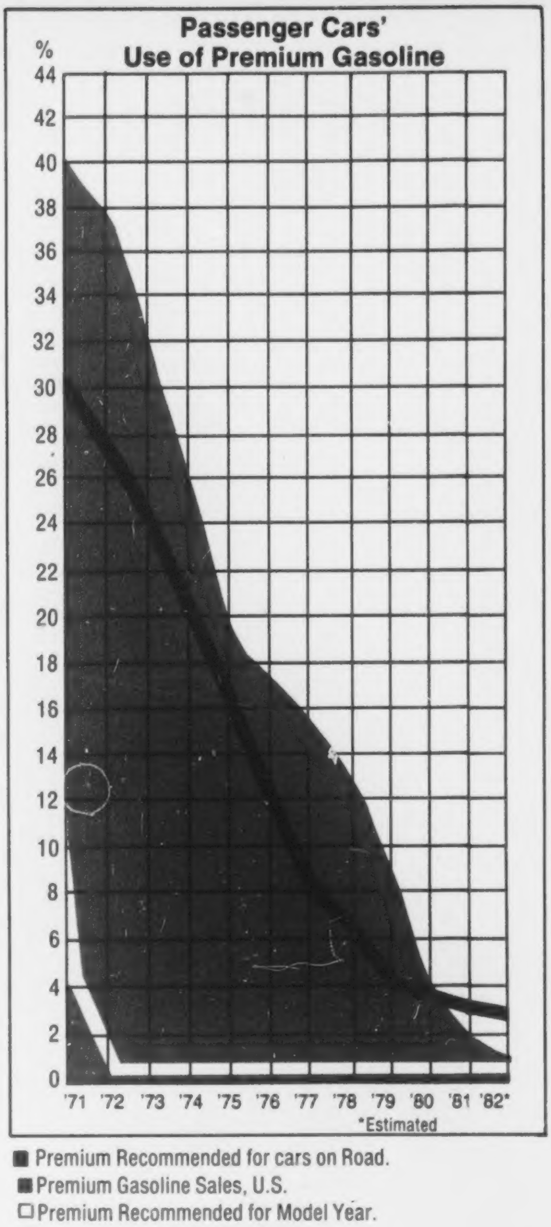
Year	Avg. annual miles per car (a)	Avg. gal. gasoline (a)	Avg. miles per gal. (a)	M/O ratio (b)	Avg. qts. motor oil
1981	**9,000**	**563**	**16.0**	**.28**	**6.8**
1980	9,135	603	15.2	.25	6.5
1979	9,245	664	14.3	.25	7.3
1978	10,046	715	14.1	.28	7.6
1977	9,839	706	13.9	.28	7.9
1976	9,763	711	13.7	.28	8.0
1975	9,364	712	13.5	.31	9.5
1974	9,448	704	13.4	.31	9.5
1973	9,992	763	13.1	.31	9.5
1972	10,184	755	13.5	.33	10.0
1971	10,121	746	13.6	.36	10.7
1970	9,978	735	13.6	.41	12.0
1969	9,782	718	13.6	.42	12.1
1965	9,387	667	14.1	.63	16.8

(a) 1965-1980 U.S. Department of Transportation; 1981 NPN estimate.
(b) Motor-oil ratio; the number of gal. of oil sold per 100 gal. of gasoline.

U.S. Passenger-Car Compression Ratios

Year	Weighted average (a)	Highest (b)	Lowest (b)
1982	**8.5**	**9.5**	**7.5**
1981	8.3	9.0	7.5
1980	8.3	9.0	7.5
1979	8.3	9.0	7.5
1978	8.2	9.0	7.5
1977	8.2	9.0	7.5
1976	8.2	9.0	7.6
1975	8.2	9.0	7.6
1974	8.2	9.0	7.6
1973	8.3	9.0	7.6
1972	8.4	9.0	8.0
1971	8.7	10.7	8.0
1970	9.4	11.0	8.3
1969	9.5	11.0	8.3
1965	9.4	10.8	8.0

(a) Weighted average is based on production of automobiles of that model year. Production statistics have been used for all years except 1982 which are estimated.
(b) Highest and lowest compression ratios of standard (not optional) engines; excludes diesels.
Source: 1965-1974, Automotive-industry sources. 1975-82 NPN estimates.



Passenger-Car Use of Premium

Year	Premium Recommended: Model Year	Premium Recommended: Cars on Road (a)	Premium Sales
1982	**0**	**3.0%**	**1.0%**
1981	0	3.0	1.4
1980	0	3.7	4.7
1979	0	4.5	8.3
1978	0	6.5	12.6
1977	0	8.9	14.8
1976	0	11.9	17.1
1975	0	15.9	19.0
1974	0	19.7	24.5
1972	0	27.1	38.1
1970	32	32.3	42.6

(a) Weighted average based on all car registrations.
Source: Premium sales 1964-1975, Ethyl Corp.; 1976-1982 NPN estimates.

Vehicle Ownership by Households And Licensed Drivers

Licensed Drivers	Motor Vehicle Ownership: One	Two	Three	Four +	Sub-Total	None	Distribution by Households (a)
One	65.6%	16.7%	12.4%	10.3%	35.8%	21.1%	33.6%
Two	29.8	73.1	47.5	36.1	50.0	3.1	42.6
Three	1.8	8.5	31.0	28.2	9.7	0.2	8.2
Four +	0.2	1.1	7.9	19.4	2.7	0.1	2.3
Five +	—	0.1	1.0	5.9	0.5	—	0.5
All Drivers	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Distribution (a) by Households	34.7%	34.3%	10.6%	5.0%	84.6%	15.4%	100.0%

(a) Based on 75.4-million households. Data compiled by Federal Highway Administration in the National Personal Transportation Study.
Source: FHA Highway Statistics 1979, Table NPTS-8, September, 1980.

Brand Names of Gasoline and Motor Oil

Gasoline	Motor Oil	
Ada Resources		
Philipps 66 (r, xr)	M&M Phillips 66 Sixty-Six Trop-Artic	
Agway Petroleum Corp.		
Agway (r, xr)	Agway	
American Petrofina Marketing		
Fina Gasoline (r) Fina Unleaded (xr, xp)	Fina Shield Fina HD Premium Fina Ultra Supreme 10W-40 Semi-Synthetic Fina 2001 5W-30	
Amos Post, Inc.		
Mobil (r)	Mobil Chevron	
Amoco Oil Co.		
Amoco Regular (r) Amoco Premium (p) Amoco (xr) Amoco Premium Lead Free (xp)	Amoco 100 Amoco 200 Amoco 300 Amoco Multivis.	Commercial
	Amolube Permalube Amoco Multivis. Amoco LDO	Reseller
Apollo Oil Co.		
Apollo (r, p, sp, diesel)		
ARCO Petroleum Products Co.		
ARCO (r) ARCO Supreme (p) ARCO Clear (x) ARCO Unleaded Supreme (xp)	ARCO ARCO Plus ARCO Supreme	
Arkla Chemical Corp.		
Arkla Regular (r) Arkla Premium (p) Arkla No-Lead (xr)	Arkla Blue Chip Arkla Royal Blue Arkla Multi-Range Super Express Super Express 15W40	
Armour Oil Co.		
Gas N Save (r, p, sp) Gas N Save (xr, xp, xsp)	Chevron	
Asamera Oil (U.S.)		
Asamera (r) (x) (xp)		
Ashland Oil Co.		
Simas (r&p) (xr) Ashland (r-p) (xr-xp)		
Atlantic Richfield Co.		
Arco (r) Arco Supreme (xp) Arco Clear (xr)	Arco Arco Plus Arco Supreme Arco Graphite	
Atlas Oil Co. of Utica		
Cities Service (r&xr) Ashland Oil (p&xp) Triangle (sp&xsp)		
Automatic Comfort Corp.		
Citgo (r, xr) Texaco (r, xr) Home Grown Fuel (xp) (†) Sunoco (r, xr) Mobile (r, xr)	Citgo Sunlube Texaco Sunoco	
Bagwell Oil Co.		
Union 76 (r, p) (x)	Union 76 Wolf's Head	
Beacon Oil Co.		
Beacon (r, p, diesel) (xr, xp)	Sequoia Beacon	
Best Oil		
Best (r, xr) Firepower (xp)		
Bi Rite Oil Co.		
Texaco (r, xr)	Texaco	
Bonded Oil Co.		
Bonded (rx) (px)	Bonded Heavy Duty Bonded All Weather	
Bray Terminals		
Citgo (r) (p) (sp) (xr, xp, xsp)	Citgo ARCO	
Browning Oil Co.		
Shell (r, xr) (xp) Rally (r, xr) (xp)†	Shell Motor Oil X-100 Fire & Ice Multigrade	
Burmah-Castrol (A)		
	Castrol Regular Castrol Heavy Duty Castrol CRF Castrol "R" Racing Oil Castrol Grand Prix Motorcycle Castrol GP Racing Castrol 10W-30, 20W-40 Castrol GTX, 10W-50, 10W-40, 20W-50	
Campbell Oil Co.		
Shell (r, sp) (xr, xsp)	Citco Sunoco Pennzoil Shell Valvoline	
Cannon Oil Corp (A)		
Cannon (r&sp) (xr)	Cannon 20W-40 Cannon HD Cannon Regular	
Cel Oil Products Corp.		
Cel (r) (p) (sp) (xr, xsp, xp) Gas Up (r, p, sp) (xr, xp, xsp) (†)		
CENEX		
Cenex (r&p) (xr) (xp) Cenex Gasohol	Cenex Econex Cenex Cenex Multigrade Cenex Superlube 518	
Central Petroleum Co. (A)		
	TracTruk Oil TracTruk Super S-1 TrackTruk Super Mil-B TrackTruk SE Service Super Racing Oil TracTruk S-3 Mil C	
Certified Oil Co.		
Certified (r, xr)	Certified Certified 10W-40	
Champlin Petroleum Co. (A)		
Champlin (r&xr) Harbor (r&xr) (†)	Champlin Geo-XL Champlin CMO Champlin HIVI Champlin S-3 Plus Champlin Deluxe Champlin TranSeason	
Charter Marketing Co. (A)		
Super Test/Billups (r&p) (xr&xp) Charter/DixieVim (r&p) (xr&xp) (†)	Your Friend Billups Premium Billups 10-W-40	
Cheker Oil Co.		
Cheker (r, xr) (xsp)	ND 20W30 HD Plus Imperial Quaker State Trop Artic 10W-40 Cheker 10W-40	
Chevron U.S.A.		
Chevron (r) (xr) Chevron Supreme (p) Calco (r&p) (xr) (†)	Chevron Delo 100 Chevron Delo 200 Chevron Special Chevron Delo 300 Chevron Delo 400 Chevron Custom	
Citadel Corp.		
Citadel (r, p, sp) (xr, xp, xsp) (diesel)		
Cities Service Oil Co.		
Citgo (r) (xr) (xp)	Citgo ND Citgo C-300 Citgo HD Citgo C-500 Citgo C515-40 Citgo All Season Multigrade 10W-30 Citgo All Season Multigrade 10W-40 Citgo Mileage Plus	
Cloverleaf Service Stations (A)		
Peoples (r&p) (x) Power (r&p) (x) (†)	Deep Rock Valu Lube Deep Rock Special HD Blue Velvet	
Coen Oil Co.		
Amoco (r, xr, xsp)	Duplex Allstar Velviline Kendall Pennzoil Amoco Union Quaker State	
Colonial Oil Industries		
Eagle (r) Colonial No Lead (xr)	Eagle Lube Colonial Regular Colonial Heavy Duty	
Como Oil Co.		
Phillips (r)	Phillips	
Consumers Inc. (A)		
Consumers (r&p) Consumers Gasohol	Liquid Gold Liquid Gold X HD	
Conoco		
Conoco Regular (r) (xr) Conoco Premium (xsp)	Par Tracon Tracon Supreme Fleet Fleet Supreme Super Motor Oil Super New Generation All Season DN600 Synthetic	
Consumers Oil Corp.		
Citgo (r, xr) Chevron (r, xr) (†)	Citgo Chevron	
Cook & Cooley		
Fire Chief (r)		
Cray Energy		
Citco (r, xp, xsp)	Citco Shell Texaco Pennzoil	
Crystal Flash Petroleum Corp. (A)		
Crystal Flash (r) Super Flash (p) Crystalhol (xp)		
Crystal USA, Oil Co.		
Crystal (r)	Saxon Amalie	
C.S.C. Oil Corp.		
C.S.C. (r) xr) (p) (xp) (sp, xsp)		
Curtis Oil Co.		
American (r) Lead Free Amoco (xr) Amoco Premium (xp)	Amolube Amoco 200 Amoco 300 Amoco M-V Super Premalube 100	
Dead River Co.		
Exxon (r, p, xr) House Brand (r, xr) †	Motor Guard-Int. Lube UniGuard Exxon Extra Exxon Uniflow	
DeBlois Oil Co.		
Texaco (r, p, sp) Texaco Super (xr, xp, xsp)	Texaco M.O. Havoline	
Delta Marketing Co.		
Red Ace (r&p) (xr) Western (r&p) (xr) Delta (r&p) (xr)	D.M.C. Non-Detergent D.M.C. Heavy Duty D.M.C. 10W-40	
Delta Refining Co. (A)		
Delta (r&p) (xr)		
Derby Refining Co. (A)		
Derby (r&p) Star Kleen (r) (x)	Triumph Super Flex Ultra-Life Premium E2	
Desert Petroleum		
Chevron (r, xr)	Chevron	
Diamond Shamrock Corp.		
Trail Master (r) Cloud Master (r) Cloud Master II (xr)	LPG-NG Boat'N Trail Triple Action Equa Flow	

Key

Gasoline	(r)	Regular
	(x)	Unleaded
	(p)	Premium
	(sp)	Superpremium
	(†)	Secondary brand

(A) Most recent information available. No reply received from current questionnaire.
Source: NPN questionnaires.

Gasoline	Motor Oil
Direct Oil Corp.	
Direct (r&p) (xr)	
Dixie Oil Co.	
Dixie (r&p)	Dixie Thrift
Dixie (xp)	Super Dixie
Dominion Oil Co.	
Dominion (r, p, sp) (xr, xp, xsp)	
Don Foster Oil Co. (A)	
Regular (r, xr)	Quaker Maid
	Pennzoil
	Sunoco
	Mobil
Drake's Refinery Stations	
Drake's (r, p, sp) (xr, xp, xsp)	Royal Express
	Quaker State
	Pennzoil
	Kendall
Eddy Refining Co. (A)	
Eddy Commercial Regular (sr)	
Eddy Premium Regular (r) (x)	
Eddy Ethyl (p)	
Elm City Filling Stations	
Elmco (r) (xr)	MacMillan Motor Oils
Elmco (*p)	
Elmco (sp, xsp)	
Nutmeg (r, xr) †	
E.M. Bailey Distributing Co.	
	Chevron
	Quaker State
Englefield Oil Co.	
Duke (r, p, sp) (xr, xp, xsp)	Duke
Etna Oil Co. (A)	
Etna Regular (r)	Etna Premium
Etna Premium (p)	Etna HD
Etna Unleaded (xr)	Etna ATF
Exxon Co., U.S.A.	
Exxon (r)	Oilex
Exxon Unleaded (xr)	Exxon Plus
Exxon Extra (xp)	Exxon Extra
	Uniflo
Farm Stores	
Farm Stores (r, xr)	
Farm Stores (xp)	
Farmland Industries	
Co-op (r)	Co-op Double Circle
	Co-op Dual Season
	Co-op Diesel Engine
FCX, Inc.	
Unico (r&p) (xr)	Unico
Fireline Petroleum	
Dis-gas (r, xr) (sp)	
Fisca Oil Co.	
Fisca (r)	Fisca HD
Fisca (xr, xp)	Fisca 10W-40
Fleet-Wing Div., Pennzoil Co. (A)	
Fleet-Wing (r&p)	Piston Seal
Fleet-Wing (sr) (x)	MG
	Super MG
	MG 10W-30
	Super MG 10W-40
Fletcher Oil Co. (A)	
Veltex (r&x)	
Flying J Oil Co.	
Flying J (r&p) (xr)	
Fastway (r&p) (xr) (†)	
Fortmeyer's, Inc. (A)	
Pennzoil (r)	Pennzoil
FS Services (A)	
FS Super Power (r) (xr)	FS Blue Circle
	FS Super Lube
	FS Low Ash
	FS Multi-Range
	FS Super Lube 15W-40
Gas Pumpers of America Corp. (A)	
U-Save (r&p) (x)	
Gasco Gasoline	
Gasco (r, p, sp) (xr, xp, xsp)	Gasco
Jiffy (r, p, sp) (xr, xp xsp) †	

Gasoline	Motor Oil	
Getty Refining & Marketing Co. (A)		
Getty Unleaded (xr)	Veedol Veelube	
Getty Premium (p)	Veedol 10W-40	Eastern
Skelly Regular (r)	Getty Gold	Region
Surfco (r&p) (xr) (†)	Getty HDT	
	Getty HDS-3	
	Skelly Ranger	
	Skelly HDT 100	
	Skelly Tagolene	
	Skelly Tagolene HD	Central
	Skelly HDT 300/400	Region
	Skelly Supreme	
	Skelly Supreme Plus	
Giant Industries (A)		
Giant (r, xr, p)		
Golden Imperial		
Imperial Regular (r)	Lonestar	
Imperial Leadfree (xr)		
Imperial (p)		
Great River Oil Co. (A)		
Great River (r)	Great River	
GR Premium (xsp)	Quaker State	
Oklahoma (r) (†)	Pennzoil	
Oklahoma Super Unleaded (xr) (†)	Amoco Super Permalube	
	Amoco LDO	
Gresham Petroleum Co. (A)		
Amoco (r, xr)	Amoco	
Amoco (xsp)		
Growmark, Inc. (A)		
FS Superpower (r, xr)	FS Blue Circle	
	FS Super Lube	
	FS Low Ash Engine Oil	
	FS Multi-Range	
	FS Super Lube 15W-40	
Gulf Oil Co., U.S.		
Good Gulf (r)	Saphire	
Gulf (sp)	Gulflube	
diesel	Gulf Pride	
	Gulf Pride Premium	
	Gulf Pride SP	
Guttman Oil Co. (A)		
Texaco Fire Chief (r, xr)	Lub-O-Lene	
Texaco (xsp)	Valvoline	
Mobil (r, xr)	Texaco	
	Mobil	
	Kendall Non-Detergent	
	Pennzoil	
	Quaker State	
Higgins Oil Co.		
Shell (r, p) (x)	Shell	
Ashland (r, p, sp) †		
Highway Oil (A)		
Highway (r) (xr)	The Workingman's Friend	
Highway Gasohol		
Highway Regohol		
Hinkle Distributors		
Chevron (sr, r)	RPM	
	Zerolene	
	Chevron	
Hi-Quality Lo-Cost Service Stations		
Hi-Quality Lo-Cost (r, xr, xp)		
Hop-In Food Stores		
Hop-In (r, xr, xp)	All Major Brands	
Hop-In Diesel		
Hornet Oil Co.		
Hornet (r&p) (xr)		
Hudson Oil Co. (A)		
Hudtane (sr)	Hud	
Hudson Super Regular (r)	Hudson Heavy Duty	
Hudson Premium (p)	Hudson Premium 10W-40	
Hudson Unleaded (xr)	Hudson ATF	
Hughes Oil Co.		
Mobil (r, xr, xsp)	Mobil	
Phillips 66 (r, xr)	Phillips 66	
Hull Oil Co.		
Hull (r) (xr)		
Husky Oil Co.		
Husky (r, xr)	Husky Superlube	
	Husky HD	
	Husky HD Special	
	Husky Stratolube All Season	
	Husky Stratolube 10W-40 Long Distance	
Imperial Florida Oil Co. (A)		
Imperial (r&p) (x)	Imperial HEP	
	Imperial Premium	
	Imperial AW	

Gasoline	Motor Oil
Imperial Refineries Corp. (A)	
Imperial (r&p) (xr)	HEP-Non-Detergent
	Titan-ND
	Imperial HD
	Imperial 10/30
J. & L. Oil (A)	
J & L Regular (r)	J & L Special ND
Golden Ethyl (p)	J & L Certified HD
Blue Streak No Lead (xr)	Certified 10W-40
	J & L ATF
J. S. & J. Service	
Jimmys (r, p, sp) (xr, xp, xsp)	
Jones Oil Co.	
Sunlite (r, xr)	Diamond
	Sunlube
Kalbab Industries (A)	
	Rev
	Hygrade
	Kalbab
Kelley-Williamson Co.	
Mobil (r, sp)	Mobil
Kent Oil Co.	
Unbranded	
Kerr-McGee Refining Corp. (A)	
K-M (r) (other x)	Kerr-McGee Valu Lube
	Kerr-McGee HD
	Kerr-McGee Special HD
	Kerr-McGee Blue Velvet
Kickapoo Oil Co.	
Kickapoo (r) (xp)	
Kimber-Allen Petroleum Corp.	
Amoco	Amoco
Citco	Citco
Getty	Getty
Kimbro Oil	
Amoco (r, xr, xp, xsp)	Amolube
	Amoco 20030
	Amoco MV 10W30
	Amoco LDO 10W40
Kmoco Oil (A)	
Shell (r, x, p, sp)	Sun
Sun (r) (†)	Shell
Koch Marketing Co. (A)	
Regular (r)	Longlife Lube
Premium (p)	High Performance 10W-40
Unleaded (mg x)	
Krause General Oil Corp.	
Kerr McGee (r, xr)	Kerr McGee
Darby (r, xr)	Shell
Lake Shore Oil Co.	
Phillips 66 (r, xr)	Phillips
Land O'Lakes, Inc. (A)	
Felco (r&p) (x)	Felco Low Ash
	Felco
	Felco Super Clean
Lehigh Oil Co., Inc. (A)	
Lehigh (r) (xr)	Lehigh ND
	Lehigh HD
	Lehigh 10-40
Liberty Petroleum Co. (A)	
Liberty (Blending Pumps 5 Grades)	Perfex
	Perfex HD
Liberty (sr) (x)	Perfex All Season
Lido Co. of New England	
Amoco	Lido
Shell	Amoco
Lido	Shell
Macmillan Ring-Free Oil Co.	
	Royal Scot
	Macmillan Ring-Free
	Macmillan Ring-Free Premium
Main Bros. Oil Co.	
Citgo (r, p) (xr, xp)	Citgo
Malco Products	
Malco (r, xr, xp)	
Marathon Oil Co.	
Mile-Maker (r) (xr)	Thoro Lube
Super-M (xp)	VEP Heavy Duty
	VEP All-Season 10W-30
	Superior All Season
	Ultra-D

Brand Names (cont'd).

Gasoline	Motor Oil
Martin Oil Co. (A)	
Martin (r&p) Martin (mg) (x)	Martin Masterall Martin Heavy Duty Martin 10W-40
Martin Oil Service	
Martin Regular (r) Martin Premium (p) Martin Unleaded (xr) Martin Gasohol	Martin Martin Heavy Duty Martin All Season 10W-30, 10W-40
McDowell Oil Service, Inc.	
ARCO (r, xr, xsp)	ARCO
Meenan Oil Co., Inc.	
Mobil (r, xr, p, xsp)	Mobil
Merit Oil Corp.	
Merit (r, xr, xp)	Merit (Economy) Merit (Supreme)
Merritt Truax, Inc.	
Firechief (r) Sky (xp) Texaco (xsp)	
M.F.A. Oil Co. (A)	
MFA (r&p) (x)	MFA Sho-Me MFA HD MFA DS 3 MFS HD Special MFA Super HD
Mico Oil Co.	
Mico (r, xr, xsp)	Fisca HD Fisca 10-40 Premium
Midland Cooperatives	
Fire Power (r&p) Fire Power (x)	Lanco Midco Golden D Supreme
Mid Missouri Oil Co.	
Shell (r, xr, xsp) Mid Mo Oil (r, xr)	Shell
Midwest Oil Co. (A)	
Midwest (r&p) (x)	Moco Midwest Premium Midwest Hi-Det Midwest Hi-Det MF
Miller Oil Co.	
Hy-Flash (r, xr)	Kendall
Miller & Holmes	
M & H (r&p) (xr)	
The Miller Oil Co.	
Hy-Flash (r&p) (xr)	Kendall
Mobil Oil Corp.	
Mobil Regular (r) Mobil Premium (p) Mobil Unleaded (xr) Mobil Super Unleaded (other) (x)	Mobil Regular Mobil HD Mobil Special Mobil Super Mobil 1 (Synthetic)
Monarch Oil & Supply Co.	
ARCO (r, xr, xsp)	ARCO 30 ARCO XHD ARCO Plus ARCO Supreme ARCO Graphite
Motorgas Oil & Refining Corp. (A)	
Mogas (r&p) (x)	
Murphy Oil Corp.	
Spur (r) (xr, xp)	Spur Durable Spur HD Spur EMO Supreme
Newell Oil Co.	
Gulf (r, p, sp) (xr, xp, xsp)	Gulf
R. B. Newman Fuel Corp.	
Noco (r, xr, xp)	Mobil
Old Colony Petroleum Co. (A)	
Old Colony (r&p) (x)	Old Colony Standard Old Colony HD Old Colony 10-30 Old Colony 10-40
Orleans Oil Co. (A)	
Orleans (r, xr)	Unique MM TropArtic Single G TropArtic Multi G
OWC Ltd. (A)	
Racetrac (r&p) (x) Raceway Oil Well (r&p) (x) (†)	
Palm Oil Co. (A)	
Palm (r, mg&p) Palm (°r, °mg&°p) Palm (xr, xmg&xp)	
Peavey Oil Co.	
Texaco (r, p, sp) (xr, xp, xsp)	Texaco Havoline Pennzoil
Pennsylvania Petroleum Products Co. (A)	
	Quaker City Economy Quaker City Premium Quaker City HD Quaker City HD 10W-30 Quaker City HD 20W-50 Quaker City HD 10W-50 Quaker City Long Drain Quaker City 15,000 Mile Quaker City Outboard Quaker City Racing Quaker City Dexron Quaker City Type F Quaker City Type A Brytol 10W-30, 10W-40, 10W-50, 20W-50 Rugby
Pennzoil Co. (A)	
Pennzoil (r&p) Pennzoil (x)	Pennzoil Regular Pennzoil Z-7 Pennzoil Multivis, W/Z-7 PZL Extended Life
Penreco (A)	
Penreco (x) (r&p)	
Pester Corp. (A)	
Pester (r) (xr) Pester Super Bonus (mg) Pester Gasohol	
Petroleum Sales & Service	
Amoco (r, xp, xsp)	Quaker State Amoco
Phillips Fuel Co.	
Texaco (r) (xr)	Texaco Havoland
Phillips Petroleum Co.	
Phillips 66 (r&p) (xr, xp)	Unique MM Trop-Artic
Piasa Motor Fuels	
Conoco (r) (xr, xp)	Conoco
Pilot Oil Corp.	
Pilot (r&p) (xr, xsp)	Pilot
Pioneer Oil Co. (A)	
	Quality Lube Pioneer Pioneer HD Pioneer 10W-30 Pioneer 10W-40 Pioneer 10W-50
Port Oil	
Port (r&p) (xr) (xp)	Port Regular Port HD Port 10W-40 Port Transmission
Powerine Oil Co.	
Powerine (r, p&xmg)	
Power Test Corp.	
Power Test (r&p) (xr) (xp)	Power Test Power Test HD Power Test All Weather Power Test (Dexron)
Pride Oil Co. (Miss.)	
Pride Oil Co., Inc. (Tenn.)	
Tenneco (r, xr, xp) (diesel)	Kendall Pennzoil Quaker State Havoline
Publix Oil Co.	
Publix (r) (xr)	
W. H. Pugh Oil Co.	
Peerless (r) Clipper (p)	Peerless
Quaker State Oil Ref. Corp.	
Sterling (r) (xr)	Quaker State HD Quaker State HDX Universal Fleet Oil Quaker State Racing Oil Quaker State Super Blend Quaker State Deluxe Quaker State Sterling
Quality Oil Co.	
Shell (r, xp, xsp)	Shell Shell X-100 Fire & Ice 10W40 & 10W50
Racetrac Petroleum	
Racetrac (r&p) (xr, xp) Raceway (r&p) (xr, xp)†	
Reinhardt Oil Corp.	
Sun (r) (p, sp) (xr, xp, xsp) Citgo (sr, xsr), (†)	Sun Citgo
Remote Services (A)	
Convenient (r&p) (xr) Petco (r, xr) (†)	
Republic Oil Corp. (A)	
Elcam (r) Elcam Diesel Dixxie Diesel (†)	
Rex Oil Co. of Florida (A)	
Rex (r&x)	
Reynolds Industries	
Port (r, xr, xp)	
Rich Distributors (A)	
Rich (r&p) (xsr)	
River Oil Co.	
Phillips (r, mg)	Phillips
Rogers Oil Co.	
Diamond (r&p) (xr)	
Romaco	
Thrifty (r, p, sp) (xr, xp, xsp) Red Rock (r, p, sp) (xr, xp, xsp)†	
Sahara Oil Co., Inc.	
Texaco (r, xr, xsp) Getty (r, xr, xsp)†	
Santee Oil Co., Inc.	
Shell (r, xr, sp)	Shell Fire & Ice X-100
Sav-Go Oil Co. (A)	
Sav-Go (r, mg&p) (xr) Swift (r, mg&p) (xr) (†)	
Schaeffer Oil (A)	
Mobil (r, xr)†	Rovel 10W-30 Rovel 10W-40
Sears Oil Co. (A)	
Sears (r&p) (xr)	Sears Tri Pure Sears Premium Sears Supreme
Seminole Asphalt Refining Co.	
Seminole (r, xr)	
Shay Oil Co. (A)	
Exxon (r, xr) Exxon (p)	Exxon
Shelby Petroleum Corp.	
Peer (r, p, sp) (xr, xp, sp) Sail (r, p, sp) (xr, xp, sp)†	Bonus Regular Sail Premium Peer Improved Premium Peer HD
Shell Oil Co.	
Shell (r) Shell (xr) Shell Super (xp) East of Rockies	Shell Motor Oil Shell X-100® Shell Fire & Ice®
The SICO Co.	
Citgo (r, xr) (xp) ARCO (r, xr) (†) Texaco (r, xr) (†)	Citgo ARCO Valvoline Texaco
Sigmor Corp.	
Shamrock (r&p) (xr) (xp) Fill em Fast (r, xr, xsp)†	Genuine Liberty
Simon Oil Co.	
Sunoco (r, xr) Mobil	Sunoco Mobil
Sinclair Marketing (A)	
Sinclair Dino (r) Dino Supreme (p) Sinclair Unleaded (x)	Dino Econoil Dino Dinolene Dino Supreme
Sing Oil Co.	
Sing (r, xr, p)	Sings Oil Sing Select

Gasoline	Motor Oil
Smith-Shafer Oil Co.	
SS (r, xr, xp)	Quaker State
SMO, Inc.	
Texaco B.P. All grades ARCO Citgo	Texaco B.P. ARCO Citgo
South Central Oil Co. (A)	
Premier/Freeway (r&p) (xr)	Premier/Freeway ND Premier/Freeway HD Premier/Freeway 10W-40
Southeastern Petroleum Sales Corp.	
SOC (r) (xr)	
Southern Counties Oil Co. (A)	
ARCO (r, xr, xp) SCOC (r, xr, p, sp)†	
Speedway Petroleum Co. (A)	
Speedway (r&p) (x)	Speedway Label
Spencer Co.	
American (r) Amoco (xr, xsp) Citgo (r, xr, xsp)†	Amoco Citgo Quaker State
Standard Oil Co. (Indiana)	
Amoco (r, p, xr, xp)	Amoco Amolube Amoco 100 Amoco 200 Amoco 300
Standard Oil Co. (Ohio)	
Octron (r) Catron (xp) Wm. Penn (r&p) (xr) Gas & Go (r, xr)†	Premex 10W-30 BP Extra Duty 10W-30 Nitrex MPG5W-40
J. D. Streett & Co.	
Zephyr (r, xr, xp) (diesel) Martin (x, xr, xp)†	Cardinal Outboard Zephyr HPX SA Zephyr Super Multipurpose Zephyr SMP All Weather Zephyr Super HD Zephyr LMO
Star Oil Co.	
Shell (r, xr, xp)	Shell Shell X-100 Shell Rotella Shell Rimula Shell Fire & Ice 10W40 Shell Fire & Ice 10W50
Suburban Propane Gas Corp.	
(r, xr)	
Sunmark	
Sunoco (r) Sunoco (xr, xp, xsp) Sunlite (xr) Circo (†) Mascot (†) Cam-2 (†) Stop-'N-Go (r&p) (xr) (†)	Diamond Sun Lube Dynalube Special MPG Plus
Sunland Ref. Corp. (A)	
Sunland (r) Sunland Ethyl (mg) Sunland Imperial (p) Unleaded (x)	Snow Crown Dieseleze Frictioneze Multi-Service 303
Sunny Service Stations, Inc.	
Sunny (r, p, sp, xr, xp, xsp)	Arrow Valvoline Havoline Pennzoil
Sunshine JR Stores	
JR (r, xr, xp)	
Tanner Oil Co.	
Rich (r&p) (xr)	
Taylor Oil Co.	
Etna (r, xr, xp)	Etna HD Etna 10W40
Tenneco Oil Co. (A)	
Tenneco (r&p) (x) Direct (r&p) (other x) (†) Bay (r&p) (other x) (†) Trust (mg) (†) Caldor (mg) (†)	Shur-Lube Tenneco Special Detergent Tenneco ATF Direct Premium Tenneco Extra HD Tenneco Four Seasons
Terrible Herbst (A)	
Terrible's Super (sp) Terrible's Ethyl (other) Terrible's Unleaded (other) (x)	
Tesoro Petroleum Corp. (A)	
Tesoro (r&p) (x)	
Texaco Inc.	
Fire Chief (r) Lead Free (xr) (xp)	Texaco Havoline Havoline Supreme 10W-40
Texas City Refining, Inc. (A)	
TCR (r&p) (x) Rebel (r&p) (x) (†)	TCR
Texas Star Oil Co.	
Texas Star (r) (xr)	TSO Superior
Texstar Automotive Distribution Group (A)	
	Penetrex Quaker Maid
Thornhill Oil Co., Inc.	
Conoco (r, p, sp, xr, xp, xsp)	Conoco Par Conoco Tracon Conoco Super
Thornton Oil Corp.	
Thornton (r, p, sp) x)	Thornton
Thrifty Oil Co. (A)	
	Luballoy
Thunderbird Petroleums (A)	
Vista (r, mg&p) Vista (*r, *mg&*p) Vista (xr, xmg&xp) Westland (r, mg&p) (†) Westland (*r, *mg&*p) (†) Westland (xr, xmg&xp) (†) Westland (r&p) (xr) (†)	Itasca Dura
Tiona Petroleum Co. (A)	
	Tiona Regular (ND) Tiona Deluxe HD Tiona Complete Fleet Tiona Multivis Tiona Multivis 10W-30, 20W-40 Tiona Multivis 10W-40
Tosco Corp. (A)	
Lion (r&p) (xr) Red Bird (r&p) (xr) (†)	Tiger HDX Naturalube Extra HD Naturalube Super Duty Naturalube Multi Temp
Total Petroleum	
Total (r, p, xr) Vickers (r, xr, p) (†) Best (r, xr, p) (†) Apco (r&p) (xr)	APCO Defiance Total Dura Lube Vickers Big Value Total Super HD Vickers Golden Supreme Total Superlube 10W30 Total 500 Vickers 10W40
Transit Oil Co. (A)	
Transit (r, mg, p&sp) (x)	
Travelers Petroleum	
Self Way (r&p) (xr) (xp)	
Tresler Oil Co.	
Comet (r) Supremium (p) Comet No Lead (xmg)	TC 1-2-3
Tulsa Oil Corp. (A)	
Tulsa (r) (x)	Gulf Coast
UCO Oil Co. (A)	
UCO (r, mg&p) (x)	
Union Oil Co. of Calif.	
Union 76 (r) (xr) Union 76 Super (p)	Union Premium Union Super Union Long Distance Purple
Union Texas Petroleum Div. of Allied Chemical Corp. (A)	
Texgas (r&p) (x)	TMO LPG S-3 Top Torque Omni ATF
United Refining Co. (A)	
Keystone Powerfuel (r) Keystone Powerlite (p) Keystone Powerclean (xr)	Emblem Powerlube
U.S.A. Oil (A)	
USA (r&p) (other x)	Saxon
USA Petroleum Corp. (A)	
USA (r&x) USA (p)	Rival USA Economy USA Premium USA All States
Valvoline Oil Co. (A)	
	Valvoline ND Valvoline HD Super HPO Valvoline HP Racing MO Valvoline All-Fleet Valvomatic Automatic Trans. Fluid Valvoline All-Climate HD Valvoline XLD
Vickers Petroleum Corp. (A)	
Vickers (r&p) (xr) Vickers Gasohol	Vickers Big Value Vickers Golden Supreme Vickers 10W-40
Wake Up Oil Co.	
Wake Up	
Warelubco, Inc. (A)	
Wareco (r&x) Wareco Ethyl (p)	Wareco Premium Wareco Plus Wareco Super All Season
Webaco Oil Co.	
Citgo (r, xr, xp, p)	Citgo
Webb Oil Co.	
Rebel (xr)	
Webster Oil Co.	
Phillips (r, xr)	Unique HDS Super HD TropArtic Single Grade TropArtic 10-40
Wesson	
Texaco (r, p, sp, xr, xp, xsp)	Texaco
Western Farmers Assn. (A)	
WFA (r&p) (xmg)	Co-op Regular Co-op T-200 Co-op Double Circle Co-op Dual Season Co-op Diesel
Western Marketing Inc. (A)	
Conoco (r, xr) Champlin (r, xr) (†)	Conoco Mobil Amolie Exxon Quaker State Pennzoil
Western Petroleum Co. (A)	
Action (r&p) (x) U-Pump-It (r&p) mg) (x)	
Wickland Oil Co.	
Regal (r, p) (xr)	Gold Shield
A. T. Williams Oil Co. (A)	
Wilco (r) (xr)	Wilco
J. H. Williams Oil Co.	
Union (r, xr) (p, xp) (sp, xsp)	Union Custom Union HD Union Premium Union Super Union 20W50 Union Long Distance Purple
Witco Chemical Corp. (A)	
	Kendall Dual Action Kendall Superb Kendall GT-1 Kendall F-L Select Kendall Super-D III (also makes and markets the following brand name) Amalie HD-1 Amalie 1-2-3 Amalie Imperial Amalie Pro
Zephyr	
Zephyr (r, xr, p, xp)	Zephyr Pride Zephyr XLL

Trends in Service Station Activity

	% Change in Total Marketing Expenditures		New Stations		Rehabilitations		Self-Service		Deactivation	
	1982	1981	1982	1981	1982	1981	1982	1981	1982	1981
Company A	44.8%(a)	170.9%(a)	—	—	—	—	—	—	—	—
Company B	−20.1	−7.0	10	8	15	30	15	30	10	20
Company C	−12.5	−17.2	—	—	—	—	—	—	—	—
Company D	6.9	41.1	—	—	—	—	—	—	—	—
Company E	0.0	37.5	—	—	—	—	—	—	—	—
Company F	NA	42.0	—	—	—	—	—	—	—	—
Company G	NA	27.8	—	—	—	—	—	—	—	—
Company H	NA	2.1	—	—	—	—	—	—	—	—
Company I	NA	117.5	—	—	—	—	—	—	—	—
Company J	−4.4	−28.1	—	—	—	—	—	—	—	—

(a) Mostly for vapor recovery equipment.
Source: NPN questionnaires, of which some were returned blank and unsigned.

New Stations vs. Closed Stations

	1981	1980	1979	1978	1977	1976	1975	1974	1973	1972
New Stations	297	169	286	353	284	319	206	206	1,177	1,689
Deactivated Stations	4,273	3,380	3,724	5,138	5,683	5,676	4,127	6,041	9,342	3,498

Note: All annual totals are based on reports from 28 companies except those of 1975 (25 companies) and 1974 (23 companies). Thus year to year comparisons cannot be made without weighting the totals.
Source: American Petroleum Institute, May, 1982.

Service Station Construction Plans: Few Marketers Want to Talk About Them Now

It was obvious in 1981 that many suppliers were revising marketing plans and strategies, but most were reluctant to say anything more than they absolutely had to, in public, that is.

Even a confidential NPN survey produced miminal results, as is indicated in the table at the top of this page. Of the questionnaires that were returned, most suppliers said they considered data on new stations, rehabs and deactivations proprietary information. This is in contrast to the past when many willingly talked about growth programs; in fact, were almost anxious to.

For some suppliers, the trend report above indicates a positive approach to marketing investment in 1981, with expenditures in the plus side over 1980. Of the two that gave 1982 forecasts, two were on the up side, two on the reduction side.

American Petroleum Institute's annual report on new stations versus closed stations showed an upsurge both in deactivations and new construction. Deactivations in 1981 were up 26% over 1980 and reflected the greatest number of closures since 1978. Deactivation, in the eyes of the API report, is closure of the facility and removal of all retailing equipment. It also confirms that the supplier has no intention of renewing operations there at any time in the foreseeable future.

Earlier this year, a McGraw-Hill economic survey commented on the petroleum industry's spending plans for 1982.

Noting that oil will have an 8.2% increase in 1982, it added: "That compares with annual gains of more than 25% in the past two years and, if realized, would be the smallest advance in petroleum capital spending since 1973 when outlays declined by some 2%. Since petroleum companies account for about 8% of all business' capital expenditures, a spending slowdown in this key industry weakens the overall capital spending picture.

The McGraw-Hill report also had this to say:

"Causes of the petroleum deceleration appear straightforward. For one thing, demand for refined products is way down, so much that refinery capacity stands idle. Moreover, conservation may have permanently cut demand for gasoline and home heating oil so even if the economy turns up soon it doesn't necessarily mean consumer demand for oil products will turn up as much."

Capital Spending Slows Down in '81

At the turn of the year, capital spending plans by and for the oil industry were still on the bright side, although the hectic pace of recent years had slowed down a bit. But the continuing crude and product glut and further decreases in consumption, coupled with the economic recession that seemed to get worse in the first half of the new year, put all sorts of question marks on what really is going to happen to capital spending in 1982.

The near-collapse of foreign and domestic crude oil prices also had a depressing effect on the outlook for any more spending than is really necessary.

McGraw-Hill, Inc., whose year-end forecasts have been a traditional feature of NPN Factbooks, toned down the 1981 and 1982 projections it had made in early 1981, and looked at 1983 through more conservative eyes. Some of this cautiousness reflected the shrinking economy and some resulted from a change in its historic data.

Nevertheless, McGraw-Hill projected petroleum capital spending of $47.7-billion in 1981; $56.6-billion in 1982, an increase of 18.7%; and $61.1-billion in 1983, a further increase of 8.0%.

The publishing firm's economics department issued a caveat in its 1982-83 forecast, however. It said that it had recently reviewed all its projections of recent years, compared them with actual results, then revised its historical bases to bring the projections in line with reality.

This resulted in a diminution of all 1982 concepts and a reduction in the dollar and percentage totals in all functions of the petroleum industry. In addition, a spokesman noted, comparisons with data of the past are not possible because of this shift in the historical totals and relationships.

In the new projections for 1982 and 1983, oil marketing will not be doing badly in the capital spending pie though its total, $2.1-billion to $2.5-billion per year, is only a small part of the $48-billion to $61-billion oil companies will spend.

This forecast anticipates an expenditure of $2.1-billion on marketing facilities by the end of this year; $2.4-billion in 1982, an increase of 13.0%; and $2.5-billion in 1983, an increase of 8.4%.

On a three-year basis, then, this indicates that oil's marketing investments should top $7-billion. Although this may sound like an awful lot of money, it's just about the same level the industry has been maintaining since 1977-78, when inflation factors are considered.

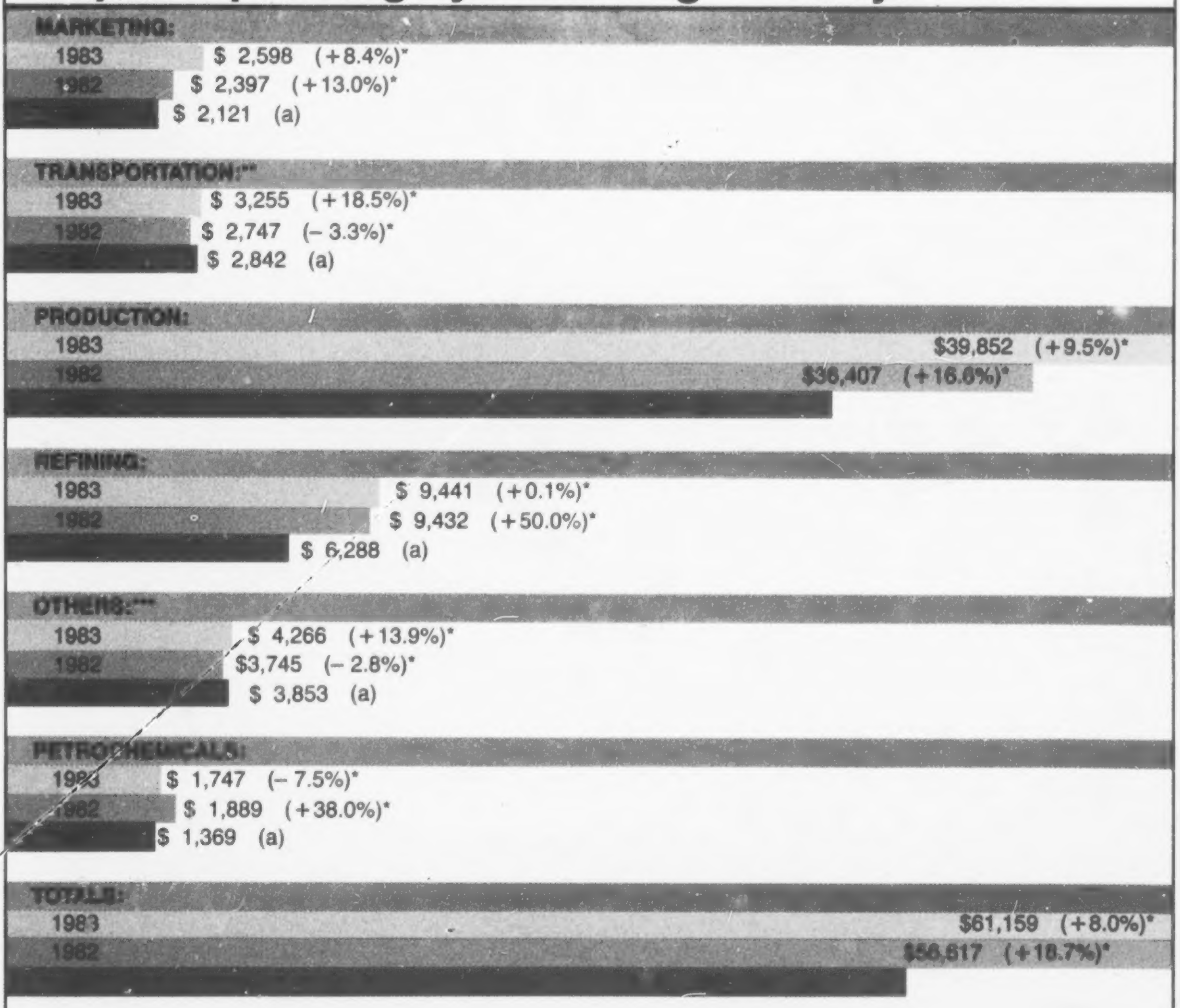
Most of this money is going into service-station modernization and construction, primarily the former; vapor recovery requirements, and other essential hardware.

It would appear, however, that these projections fall short of considering the burgeoning revolution in new equipment concepts, such as multi-product and overhead dispensers, computerization and microprocessors, and other hardware items that are now available.

McGraw-Hill says refining facilities will get capital programs exceeding $9.4-billion in 1982 and 1983, for a three-year total of $25-billion. This is the most that has been invested in refining in years. It is giving recognition to the need for more sophisticated equipment to meet the ever-spiraling demand for unleaded gasoline.

As is the tradition, exploration and production will get the lion's share of capital investments over the three years—a total of more than $100-billion. With total oil price deregulation in 1981, the returns on these investments are seen as the truly profitable activities the big companies can pursue. The incentives are in place.

Capital Spending by Marketing Industry (Millions of Dollars)



*Figures in parentheses indicate percentage of change from previous year's total. **Includes only oil pipelines, not gas.
***Includes coal mining. (a) Comparisons with prior years cannot be made inasmuch as the projection bases from 1981 on were changed materially and cannot be related.

Source: McGraw-Hill Economics Department, Nov. 1981.

How Oil Companies Handle

			BRANDED SERVICE STATIONS					
MAJOR OIL COMPANIES	TOTAL BRANDED RETAIL OUTLETS*	TOTAL NUMBER OF STATES WHERE GASOLINE BRAND IS MARKETED†	Total branded service stations	Supplied directly	Supplied through jobbers and commission agents	Lessee dealer operated	Salary operated	Commission operated
Amoco Oil Co.	20,061	46	19,712	6,789	12,923	19,585	127	0
Atlantic Richfield Co.	7,122	30	7,122	4,623	2,499	NA	NA	NA
Chevron USA, Inc.	12,748	39	7,924	6,145	1,779	7,828	96	0
Exxon Co., USA	20,585	40	20,585	8,668	11,917	NA	NA	NA
Gulf Oil Co., U.S.	13,870	30	13,870	6,232	7,638	13,221	649	0
Mobil Oil Corp.	16,564	45	NA	NA	NA	NA	NA	NA
Shell Oil Co.	13,665	36	5,764	5,764	—	5,709	55	—
Texaco, Inc.	22,490	50	—	5,403	15,968	21,139	5	227
SEMI-MAJOR OIL COMPANIES								
Ashland Petroleum Co. (xxx)	271	8	271	271	0	271	0	0
Cities Service Oil Co.	5,784	31	5,510	455	5,055	105	350	0
Conoco, Inc.	4,885	28	NA	—	—	—	—	—
Diamond Shamrock Corp.	1,579	12	1,579	4	1,575	1,577	1	1
Getty Refining & Marketing Co.	4,700	28	4,700	2,955	1,745	4,443	257	0
Kerr-McGee Refining Corp. (xxx)	1,431	17	1,403	372	1,031	1,271	132	0
Marathon Oil Co.	2,146	6	2,122	576	1,546	456	0	0
Murphy Oil Co.	767	14	767	612	155	250	0	0
Phillips Petroleum Co.	12,327	38	NA	—	—	—	—	—
Standard Oil Co. (Ohio)	3,965	19	3,552	2299	1253	—(R)	—(R)	—(R)
Sun Company, Inc.	8,361	33	7,588	4,544	3,044	7,410	178	—
Tenneco Oil Co.	484	17	484	484	—	16	468	—
Union Oil Co. of Calif.	12,529	44	7,121	3,123	3998	2,461(U)	62(U)	0(V)
INDEPENDENT OIL COMPANIES AND SELECTED OIL JOBBERS								
Ada Resources	207	1	207	130	77	175	32	—
Agway Petroleum Corp.	283	9	264	264	—	129	133	2
American Petrofina Marketing, Inc.	4,014	20	3,211	0	3,211	0	0	0
Amos Post, Inc.	32	1	20	32	0	13	3	4
Apollo Oil Co.	13	1	13	13	—	—	13	—
ARCO Petroleum Products Co. (A)	7,122(E)	30	7,122(E)	4,623	2,499(E)	NA	NA	NA
Arkla Chemical Corp.	7	3	4	4	—	6	1	—
Armour Oil Co.	34	11	34	25	—	—	34	—
Asamera Oil, Inc. U.S.	110	11	110	110	—	81	28	1
Ashland Oil Co. of Calif.	14	1	13	14	—	1	12	1
Atlas Oil Co. of Utica, Inc.	7	1	7	7	0	3	—	—
Automatic Comfort Corp.	54	1	34	34	—	—	24	10
Bagwell Oil Co. (C)	16	2	4	4	—	4	—	—
Beacon Oil Co.	267	2	260	119	141	67	52	141
Best Oil, Inc.	19	1	19	19	—	—	19	—
Bi Rite Development	21	1	21	21	—	21	—	—
Bonded Oil	247	4	247	247	—	—	247	—
Bray Terminals, Inc.	54	1	54	6	49	49	6	—
Brennan Petroleum Products	3	1	0	—	—	—	—	—
Browning Oil Co.	23	1	18	—	—	13	5	—
Bursaw Oil Corp. (xxx)	50	2	NA	NA	NA	NA	NA	NA
By-Lo Oil Co.	15	1	4	4	0	0	4	0
Campbell Oil Co.	55	1	40	40	—	40	—	—
Cannon Oil Corp.	—	—	—	—	—	—	—	—
Caribou Four Corners	60	10	—	—	—	—	—	—
Cel Oil Products Corp.	20	1	5	5	—	2	3	—
CENEX	1,001	11	950	950	—	915	35	—
Certified Oil Co.	215	3	215	215	—	180	35	—
Champlin Petroleum Co. (xxx)	863	18	445	445	—	72	369	4
Charter Oil Co.	430	12	430	430	0	0	430	0
Cheker Oil Co.	405	18	405	405	—	34	367	4
Childress Oil Co.	0	—	—	—	—	—	—	—
Citadel Corp.	11	3	11	11	—	—	—	—
Coen Oil Co.	300	3	275	275	—	274	—	1
Colonial Oil Industries, Inc.	465	6	465	216	249	390	75	0
Como Oil Co.	30	1	30	30	—	29	1	—
Conna Corp.	310	13	310	310	—	—	25	285
Consumers Gasoline Stations	34	2	34	34	—	—	34	—
Consumers Oil Corp.	16	2	8	8	—	7	—	1
Cook & Cooley, Inc.	85	1	—	—	—	—	—	—
Cray Energy, Inc.	47	3	43	43	—	—	—	—
Crown Central Petroleum Corp.	215	9	215	215	0	149	66	0
Crystal Flash Petroleum (xxx)	36	2	NA	NA	NA	NA	NA	NA
Crystal USA Oil Co.	177	9	177	177	—	177	—	—
C.S.C. Oil Corp.	23	2	23	23	—	—	23	—
Curtis Oil Co., Inc. (xxx)	47	1	21	16	5	21	—	—
Dead River Co.	135	2	50	50	—	48	0	2
DeBlois Oil Co.	43	2	37	37	—	18	16	3
Delta Marketing Co. (xxx)	252	9	228	228	—	36	92	—
Derby Refining Co.	550	12	550	130	520	39	91	—
Desert Oil Co.	6	1	6	6	—	6	—	—
Desert Petroleum, Inc. (xxx)	113	1	113	113	—	—	93	20
Direct Oil Corp. (xxx)	156	10	—	—	—	—	—	—
Dividend Bonded Gas	12	3	12	12	—	—	12	—
Dixie Oil Co.	97	3	97	97	—	—	97	—
Dominion Oil Co.	28	1	28	28	—	22	—	6

(xxx) 1980 data: Company failed to respond to 1981 questionnaire.
(A) As of 12/21/81. Includes Prestige Stations, Inc.
(B) Company Operated.
(C) Includes Fulcher & Martin.
(D) Includes 4 gas, 3 fuel oil, 5 chemical.
(E) Estimated.
(F) Gasoline and distillates.
(G) Excluding two refineries.
(H) They are a Phillips Jobber.
(I) Most agents sell only propane.
(J) They are Jobbers.
(K) Percent.

Product Distribution

			BRANDED JOBBERS				COMMISSION AGENTS			
				NUMBER SELLING . . .				NUMBER SELLING . . .		
100% full service	100% self service	Service and self service	Total	Gasoline only	Fuel oil only	Gasoline & fuel oil	Total	Gasoline only	Fuel oil only	Gasoline & fuel oil
NA	NA	NA	2,167	NA	NA	2,167	2	NA	NA	—(Q)
NA	NA	NA	252	252	0	0	0	—	—	—
4,079	190	3,665	689	386	113	—	200	0	0	200
NA	NA	NA	935	26	0	909	41	41	—	—
11,367(E)	634	1,869	1,300(E)	NA	NA	NA	142	0	0	142
NA	NA	NA	2,034	54	702	1,278	47	—	—	47
1,252	1,111	3,401	695	0	28	667	0	—	—	—
NA	NA	NA	1,365	NA	NA	NA	27	NA	NA	NA
255	0	16	34	4	0	30	170	0	0	170
138	290	27	221	NA	NA	NA	0	—	—	—
—	—	—	834	NA	NA	NA	0	—	—	—
NA	NA	NA	138	—	—	138	1	1	—	—
2,156	237	2,307	538	26	0	512	3	1	0	2
64	60	1,279	314	30	40	244	0	0	0	0
928	83	1,111	79	0	12	67	0	—	—	—
85	597	85	0	—	—	—	0	—	—	—
—	—	—	1,673	NA	NA	NA	3	2	—	1
1,117(S)	386(S)	796(S)	132	26	2	104	196	196	0	0
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
9	443	32	25	25	—	—	3	3	—	—
3,476	610	3,035	620	—	—	620	193	—	—	193
175	32	—	19	19(F)	—	—	3	3(F)	—	—
6	256	2	31	5	3	23	2	2	—	—
1,577	700	934	445	378	0	67	0	—	—	—
10	3	7	—	—	—	—	—	—	—	—
—	—(W)	—	NA	—	—	—	NA	—	—	—
NA	NA	NA	252	252	—	—	—	—	—	—
3	4	—	3	0	0	3	0	—	—	—
—	—	34	0	—	—	—	0	—	—	—
0	100	10	0	—	—	—	0	—	—	—
1	13	—	0	—	—	—	0	—	—	—
7	—	—	0	—	—	—	—	—	—	—
—	34	—	0	—	—	—	10	10	—	—
4	—	—	—	—	—	—	—	—	—	—
47	193	20	141	141	0	0	0	—	—	—
4	15	—	0	—	—	—	0	—	—	—
—	—	21	0	—	—	—	0	—	—	—
48	197	2	0	—	—	—	0	—	—	—
54	—	—	87	12	75	87	—	0	0	0
—	—	—	0	—	—	—	0	—	—	—
2	1	15	0	—	—	—	—	—	—	—
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4	—	—	0	—	—	—	0	—	—	—
—	20	20	0	—	—	—	0	—	—	—
—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—
5	—	—	2	—	—	2	0	—	—	—
—	400	450	850	—	—	850	0	—	—	—
150	5	60	0	—	—	—	0	—	—	—
NA	NA	NA	304	NA	NA	NA	0	—	—	—
54	376	0	0	—	—	—	0	—	—	—
83	346	6	0	—	—	—	4	—	—	4
—	—	—	—	—	—	—	—	—	—	—
—	—	—	0	—	—	—	0	—	—	—
150	—	125	0	—	—	—	2	—	—	2
24	153	288	7	1	2	4	0	—	—	—
13	1	16	—(H)	—	—	—	0	—	—	—
9	301	—	0	—	—	—	0	—	—	—
23	11	—	0	—	—	—	0	—	—	—
8	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—
—	43	—	0	—	—	—	1	—	1	—
60	29	126	0	0	0	0	0	0	0	0
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
—	—	—	0	—	—	—	0	—	—	—
0	9	14	0	—	—	—	0	—	—	—
17	—	4	1	—	—	1	2	—	—	2
50	0	0	0	—	—	—	2	2	—	—
28	9	—	0	—	—	—	3	3	0	0
8	174	40	0	—	—	—	0	—	—	—
1	69	60	80	—	—	80	0	—	—	—
4	—	2	2	2	—	—	—	—	—	—
—	113	—	0	—	—	—	0	—	—	—
—	—	—	—	—	—	—	—	—	—	—
7	2	3	0	—	—	—	0	—	—	—
—	50	40	90	50	—	40	—	—	—	—
5	17	6	—	—	—	—	—	—	—	—

(L) Lease do not run.
(M) Majority of business not gasoline.
(N) Portion sell gasoline in Majik Div.
(O) 15 jointly owned.
(P) Owner dealer operated.
(Q) Almost all.
(R) Proprietary.
(S) Direct supplied stations only. Data not available for jobber supplied
(T) Confidential data.
(U) Non Lessee dealer—Ship Store PX—Jobber served non-dealer.
(V) Other, 4,598.
(W) Most.

BULK PLANTS				TERMINALS				
	COMPANY OPERATED				COMPANY OPERATED			
Total	Salary operated	Commission operated	Jobber operated bulk plants	Total	Salary operated	Commission operated	Jobber operated terminals	MAJOR OIL COMPANIES
21	21	0	2,478	95	95	0	4	**Amoco Oil Co.**
0	—	—	0	52	52	0	NA	**Atlantic Richfield Co.**
170	12	158	500	119	118	1	14	**Chevron USA. Inc.**
39	—	39	—	83	83	—	—	Exxon Co., USA
160	18	142	1,245(E)	97	97	0	0	Gulf Oil Co. U.S.
391(X)	100	291	1,939	100	100	0	0	Mobil Oil Corp.
92	92	—	1,137	27	27	—	—	**Shell Oil Co.**
109	82	27	1,666	NA	NA	NA	NA	**Texaco, Inc.**
								SEMI-MAJOR OIL COMPANIES
152	8	144	23	47	39	8	NA	**Ashland Petroleum Co.**
0	—	—	73	33	33	—	NA	**Cities Service Oil Co.**
0	—	—	NA	66	—	—	NA	**Conoco, Inc.**
0	—	—	NA	9	9	—	2	Diamond Shamrock Corp.
3	3	0	484	14	13	1	0	Getty Refining & Marketing Co.
0	0	0	90	3	3	0	1	Kerr-McGee Refining Corp.
1	1	—	1	49	49	0	0	**Marathon Oil Co.**
0	—	—	0	22	22(O)	0	0	**Murphy Oil Corp.**
8	4	4	1,961	33	33	—	5	**Phillips Petroleum Co.**
101	0	101	NA	35	35	0	5	Standard Oil Co. (Ohio)
NA	NA	NA	NA	40	40	—	NA	Sun Company, Inc.
0	—	—	0	11	11	—	0	Tenneco Oil Co.
229	55	174	514	62	62	—	2	**Union Oil Co. of Calif.**
								INDEPENDENT OIL COMPANIES AND SELECTED OIL JOBBERS
4	2	2	19	0	—	—	0	**Ada Resources**
129	129	—	28	12	12	—	0	**Agway Petroleum Corp.**
0	—	—	378	13(G)	13	0	0	**American Petrofina Marketing, Inc.**
4	4	—	—	2	2	0	—	Amos Post, Inc.
NA	—	—	NA	NA	—	—	NA	Apollo Oil Co.
0	—	—	0	52	52	0	NA	ARCO Petroleum Products Co. (A)
3	3	—	3	0	—	—	—	**Arkla Chemical Corp.**
0	—	—	0	1	1	—	0	**Armour Oil Co.**
0	—	—	0	0	—	—	0	**Asamera Oil, Inc. U.S.**
0	—	—	0	0	—	—	—	Ashland Oil Co. of Calif.
0	—	—	0	1	—(B)	—	0	Atlas Oil Co. of Utica, Inc.
4	—	—	0	2	—	—	0	Automatic Comfort Corp.
1	1	—	—	1	1	—	—	**Bagwell Oil Co.**
0	—	—	7	0	—	—	0	**Beacon Oil Co.**
0	—	—	0	0	—	—	0	**Best Oil, Inc.**
0	—	—	0	0	—	—	0	Bi Rite Development
1	1	—	0	0	—	—	0	Bonded Oil
2	2	0	5	2	2	0	—	Bray Terminals, Inc.
0	—	—	0	0	—	—	—	**Brennan Petroleum Products**
2	2	—	0	0	—	—	0	**Browning Oil Co.**
NA	NA	NA	NA	NA	NA	NA	NA	**Bursaw Oil Corp.**
1	—	—	0	0	—	—	0	By-Lo Oil Co.
3	3	0	—	0	0	0	0	Campbell Oil Co.
—	—	—	—	—	—	—	—	Cannon Oil Corp.
—	—	—	—	—	—	—	—	**Caribou Four Corners**
1	—	—	—	0	—	—	—	**Cel Oil Products Corp.**
35	35	—	815	7	7	—	0	**CENEX**
0	—	—	0	0	—	—	0	Certified Oil Co.
0	—	—	NA	6	6	—	NA	Champlin Petroleum Co. (xxx
0	—	—	0	12(D)	4	0	—	Charter Oil Co
0	—	—	—	0	—	—	—	**Cheker Oil Co**
—	—	—	—	—	—	—	—	**Childress Oil C**
0	—	—	0	0	—	—	0	**Citadel Cor**
2	2	0	—	0	—	—	—	Coen Oil C
2	2	0	8	2	2	—	—	Colonial Oil Industries, In
1	—	—	—	0	—	—	—	Como Oil C
0	—	—	—	0	—	—	—	**Conna Co**
0	—	—	0	0	—	—	0	**Consumers Gasoline Static**
—	—	—	—	1	1	—	—	**Consumers Oil C**
—	—	—	—	—	—	—	—	Cook & Cooley,
8	8	—	0	0	—	—	0	Cray Energy,
0	0	0	0	11	11	0	0	Crown Central Petroleum Co
NA	NA	NA	NA	NA	NA	NA	NA	**Crystal Flash Petroleum**
0	—	—	—	0	—	—	—	**Crystal USA Oil Co.**
0	—	—	0	0	—	—	0	**C.S.C. Oil Corp.**
3	1	2	1	0	—	—	—	Curtis Oil Co., Inc
17	17	—	NA	1	1	—	NA	Dead River Co
4	4	0	0	0	0	0	0	DeBlois Oil Co
0	—	—	0	0	—	—	—	**Delta Marketing Co**
0	—	—	0	0	—	—	—	**Derby Refining Co**
2	2	—	—	—	—	—	—	**Desert Oil Co**
NA	—	—	—	—	NA	—	—	Desert Petroleum, Inc
—	—	—	—	—	—	—	—	Direct Oil Corp
0	—	—	0	0	—	—	0	Dividend Bonded Ga
—	—	—	—	0	—	—	—	**Dixie Oil Co**
2	—	—	—	—	—	—	—	**Dominion Oil Co**

(X) Total wholesale distributing plants, including terminals.

(*) Total branded retail outlets includes garages, motels, c-stores and service stations. By U.S. Census Bureau definition, only establishments earning 50% or more of their income from the sale petroleum products are service stations.

(†) Total number of states where gasoline is branded includes District of Columbia.

Source: NPN questionnaires.

How Oil Companies Handle

			BRANDED SERVICE STATIONS					
INDEPENDENT OIL COMPANIES AND SELECTED OIL JOBBERS	TOTAL BRANDED RETAIL OUTLETS*	TOTAL NUMBER OF STATES WHERE GASOLINE BRAND IS MARKETED†	Total branded service stations	Supplied directly	Supplied through jobbers and commission agents	Lessee dealer operated	Salary operated	Commission operated
Don Foster Oil Co. (xxx)	46	1	17	17	—	10	7	—
Drake's Refinery Stations, Inc.	14	1	14	14	—	—	14	—
East Coast Oil Corp.	30	1	30	30	—	—	30	—
Elm City Filling Stations, Inc.	60	1	60	60	—	51	8	1
E. M. Bailey Dist. Co. (xxx)	135	2	135	81	54	92	6	37
Englefield Oil Co.	134	2	134	134	—	96	38	—
Farm Stores, Inc.	60	1	—	—	—	—	—	—
Farmland Industries, Inc.	930	11	930	—	—	—	—	—
FCX, Inc.	106	2	0	—	—	—	—	—
Fireline Petroleum	407	10	0	—	—	—	—	—
Fisca Oil Co., Inc.	104	23	104	104	—	—	104	—
Flying J, Inc.	86	9	68	71	—	—	63	8
Don Foster Oil Co.	39	1	39	39	0	31	8	—
Franks Oil Co.	104	3	104	104	—	—	104	—
Gas-N-Go, Inc.	1	1	1	1	—	0	—	—
Gasco Gasoline	134	1	134	134	—	23	91	20
General Oil Co.	54	2	54	54	—	—	40	14
Giant Industries, Inc. (xxx)	20	3	20	20	—	—	20	—
Globe Oil Co., USA (xxx)	59	4	59	58	1	—	59	—
Golden Imperial, Inc.	47	1	47	47	—	—	47	—
Golub Service Station	15	2	15	14	1	—	15	—
Great River Oil Co. (xxx)	88	2	86	88	—	88	—	—
Gresham Petroleum Co.	15	1	4	4	—	2	2	—
Growmark, Inc. (xxx)	160	4	133	0	133	70	30	33
Guttman Oil Co. (xxx)	75	3	75	75	—	—	—	—
Harrell Petroleum Co.	27	1	16	—	—	9	6	1
Harris Enterprises, Inc.	41	2	40	40	—	6	22	12
Heathwood Oil Co.	1,000	2	—	—	—	—	—	—
Higgens Oil Co., Inc.	22	1	6	6	—	5	—	1
Highway Oil, Inc. (xxx)	223	26	223	174	49	—	223	—
Angus J. Hines, Inc.	103	1	103	103	—	24	21	17
Hi-Quality Lo-Cost Svc. Stations, Inc.	18	1	18	18	—	—	18	—
Holland Oil Co.	60	1	38	32	6	38	—	—
Hop-In Food Stores, Inc.	134	3	0	0	0	0	0	0
Hudson Oil Co. (xxx)	205	29	305	305	0	0	305	0
Hughes Oil Co.	123	2	123	123	—	50	1	62
Hull Oil Co.	15	2	15	15	—	—	10	5
Husky Oil Co.	562	17	562	45(K)	55(K)	562	0	0
J & L Oil, Inc.	90	6	79	79	—	6	73	—
J. S. & J. Service, Inc.	20	2	16	16	—	—	16	—
Johnson Products	95	6	65	—	—	—	65	—
Kelley-Williamson Co. (xxx)	50	2	—	35	15	41	2	7
Kent Oil Co.	22	1	2	—	—	1	15	6
Kickapoo Oil Co., Inc. (xxx)	70	1	70	70	—	—	70	—
Kimber-Allen Petroleum Corp.	150	1	150	150	—	138	12	—
Kimbro Oil Co.	40	1	40	40	0	38	2	0
Kirschnes Bros. Oil Co. (xxx)	50	2	—	—	—	—	—	—
Krause General Oil Corp.	52	1	52	52	—	8	44	—
The Kunz Oil Co. (xxx)	33	1	33	33	—	10	23	—
Kw Shop, Inc.	101	3	101	99	2	—	99	2
Lake Shore Oil Co.	30	1	30	30	—	30	—	—
Lehigh Oil Co., Inc. (xxx)	26	4	26	26	3	0	22	4
Lerner Oil Co., Inc. (xxx)	106	1	—	—	—	—	—	—
Lido Co. of New England	108	5	108(L)	—	—	—	—	—
M Bros. Oil Co., Inc.	30	1	10	10	—	10	—	—
M o Products, Inc.	73	3	73	47	26	59	11	3
Marshall Oil Co.	50	1	50	17	—	18	7	8
Martin Oil Service, Inc.	146	13	112	112	—	4	108	—
Mauger & Co. (xxx)	65	3	50	—	—	50	15	—
McDowell Oil Service, Inc.	28	1	28	28	—	5	0	23
M an Oil Co., Inc.	1(M)	1	1	1	—	—	1	—
Merit Oil Corp.	NA	11	—	—	—	—	—	—
Merritt Truax, Inc.	56	1	56	56	—	43	3	10
Mico Oil Co., Inc.	28	14	28	28	—	—	28	—
Midland Cooperatives, Inc.	276	5	235	220	15	15	220	—
Mid-Missouri Oil Co.	14	1	7	—	7	2	5	—
M States Petroleum, Inc.	46	2	45	35	10	11	24	0
M Oil Co.	15	1	15	—	15	—	—	—
M Holmes, Inc. (xxx)	29	10	29	29	—	—	29	—
ler Oil Co.	12	2	12	12	—	11	1	—
ch Oil & Supply Co.	25	1	25	25	—	24	1	—
ford, Inc.	463	13	0(N)	—	—	—	—	—
ket Corp.	100	1	100	100	—	—	100	—
onal Convenience Stores, Inc.	131	39	0	—	—	—	—	—
Inc.	44	1	44	44	—	2	42	—
ell Oil Co., Inc	13	1	10	10	—	8	1	1
Newman Fuel Corp.	12	1	12	12	—	11	1	—
s Petroleum Corp. (xxx)	104	20	—	—	—	—	0	—
r Oil Co.	12	2	12	12	—	—	12	—
er Oil Co., Inc.	175	2	20	20	—	20	—	—
s Parker Oil Co.	41	1	18	—	18	18	—	—
ey Oil Co.	7	1	7	7	—	4	—	—
er Corp.	221	10	222	221	—	—	221	—

1980 data: Company failed to respond to 1981 questionnaire.
as of 12/21/81. Includes Prestige Stations, Inc.
Company Operated.
Includes Fulcher & Martin.

(D) Includes 4 gas, 3 fuel oil, 5 chemical.
(E) Estimated.
(F) Gasoline and distillates.
(G) Excluding two refineries.

(H) They are a Phillips Jobber.
(I) Most agents sell only propane.
(J) They are Jobbers.
(K) Percent.

Product Distribution (cont.)

			BRANDED JOBBERS				COMMISSION AGENTS			
				NUMBER SELLING . . .				NUMBER SELLING . . .		
100% full service	100% self service	Service and self service	Total	Gasoline only	Fuel oil only	Gasoline & fuel oil	Total	Gasoline only	Fuel oil only	Gasoline & fuel oil
8	8	1	1	—	—	1	0	—	—	—
1	13	—	0	—	—	—	0	—	—	—
20	—	10	0	—	—	—	0	—	—	—
57	3	—	1	—	—	1	1	1	—	—
93	30	12	0	—	—	—	8	—	—	8
25	63	46	—	—	—	—	5	—	—	5
—	—	—	—	—	—	—	—	—	—	—
—	—	—	630	—	—	—	—	—	—	—
—	—	—	NA	—	—	—	NA	—	—	—
—	—	—	0	—	—	—	0	—	—	—
57	46	1	0	—	—	—	0	—	—	—
3	65	3	—	—	—	—	26(I)	—	—	6
24	14	1	39	24	—	15	0	0	0	0
104	—	—	0	—	—	—	0	0	—	—
—	11	—	0	—	—	—	0	—	—	—
20	114	—	0	—	—	—	0	—	—	—
—	84	—	—	—	—	—	—	—	—	—
—	20	—	0	—	—	—	0	—	—	—
—	56	3	0	—	—	—	0	—	—	—
14	6	27	0	—	—	—	0	—	—	—
3	12	—	0	—	—	—	0	—	—	—
78	10	—	0	—	—	—	0	—	—	—
3	0	1	—(J)	—	—	—	NA	—	—	—
120	10	3	128	0	0	115	0	—	—	—
40	11	1	—	—	—	—	—	—	—	—
10	4	2	—	—	—	—	0	—	—	—
3	—	37	0	—	—	—	12	12	—	—
—	—	—	—	—	—	—	—	—	—	—
3	—	3	—	—	—	—	—	—	—	—
183	0	40	0	—	—	—	0	—	—	—
31	59	10	—	—	—	—	—	—	—	—
5	1	12	0	—	—	—	0	—	—	—
28	1	9	2	—	—	2	0	—	—	—
0	0	0	0	—	—	—	0	—	—	—
0	0	305	—	—	—	—	0	—	—	—
30	73	30	1	1	1	1	0	—	—	—
1	14	—	0	—	—	—	0	—	—	—
227	285	50(E)	140	—	—	140	0	0	0	0
6	72	1	0	—	—	—	0	—	—	—
16	—	—	0	—	—	—	0	—	—	—
35	—	30	0	—	—	—	0	—	—	—
35	3	12	0	—	—	—	12	—	—	12
0	20	2	0	—	—	—	0	—	—	—
—	70	—	0	—	—	—	0	—	—	—
150	—	—	0	—	—	—	0	—	—	—
—	2	38	1	—	—	—	0	—	—	—
—	—	—	—	—	—	—	—	—	—	—
—	—	52	0	—	—	—	0	—	—	—
19	13	1	0	—	—	—	0	—	—	—
—	101	—	0	—	—	—	0	—	—	—
80(K)	—	20(K)	NA(J)	—	—	—	0	—	—	—
17	9	—	0	—	—	—	4	4	—	—
—	—	—	—	—	—	—	—	—	—	—
—	—	—	3	1	—	2	0	—	—	—
10	—	—	0	—	—	—	0	—	—	—
0	73	—	7	7	0	—	0	—	—	—
—	—	50	—	—	—	—	—	17	—	—
3	102	7	NA	—	—	—	NA	—	—	—
55	10	—	NA	—	—	—	NA	—	—	—
6	22	—	—	—	—	—	—	—	—	—
1	—	—	0	—	—	—	0	—	—	—
—	—	—	—	—	—	—	—	—	—	—
56	—	—	2	—	—	2	0	—	—	—
26	2	—	0	—	—	—	0	—	—	—
75	25	135	235	—	—	235	15	—	—	15
—	6	1	0	—	—	—	0	—	—	—
11	34	—	4	—	—	4	3	—	—	3
—	—	15	0	—	—	—	0	—	—	—
1	28	—	0	—	—	—	0	—	—	—
12	—	—	0	—	—	—	0	—	—	—
23	1	1	1	—	1	—	—	—	—	—
—	—	—	NA	—	—	—	NA	—	—	—
—	100	—	0	—	—	—	0	—	—	—
—	—	—	1	1	—	—	0	—	—	—
3	41	—	0(J)	—	—	—	0	—	—	—
—	5	5	—(J)	—	—	—	0	—	—	—
8	—	4	0	—	—	—	0	—	—	—
—	—	0	—	—	—	—	0	—	—	—
—	12	—	0	—	—	—	0	—	—	—
4	—	16	0	—	—	—	0	—	—	—
13	1	4	NA	—	—	—	2	—	—	—
7	—	—	—	—	—	—	—	—	—	—
—	219	2	0	—	—	—	0	—	—	—

(L) Lease do not run.
(M) Majority of business not gasoline.
(N) Portion sell gasoline in Majik Div.
(O) 15 jointly owned.
(P) Owner/dealer operated.
(Q) Almost all.
(R) Proprietary.
(S) Direct supplied stations only. Data not available for jobber supplied.
(T) Confidential data.
(U) Non Lessee dealer—Ship Store/PX—Jobber served non-dealer
(V) Other, 4,598.
(W) Most.

BULK PLANTS				TERMINALS				
COMPANY OPERATED					COMPANY OPERATED			
Total	Salary operated	Commission operated	Jobber operated bulk plants	Total	Salary operated	Commission operated	Jobber operated terminals	INDEPENDENT OIL COMPANIES AND SELECTED OIL JOBBERS
2	2	—	1	0	—	—	0	Don Foster Oil Co.
0	—	—	—	0	—	—	0	Drake's Refining Stations, Inc.
0	—	—	0	0	—	—	—	East Coast Oil Corp.
1	1	—	0	1	1	—	0	Elm City Filling Station, Inc.
5	—	5	0	1	1	—	0	E. M. Gailey Dist. Co.
10	10	—	—	—	—	—	—	Englefield Oil Co.
—	—	—	—	—	—	—	—	Farm Stores, Inc.
—	—	—	—	—	—	—	—	Farmland Industries, Inc.
—	23	—	0	NA	—	—	—	FCX, Inc.
0	—	—	0	0	—	—	0	Fireline Petroleum
0	—	—	0	0	—	—	0	Fisca Oil Co., Inc.
5	3	2	—	7/8	—	—	—	Flying J, Inc.
2	2	0	0	0	—	—	0	Don Foster Oil Co.
0	—	—	—	0	—	—	—	Franko Oil Co.
0	—	—	0	0	—	—	—	Gas-N-Go, Inc.
0	—	—	0	1	1	—	0	Gasco Gasoline
—	—	—	—	—	—	—	—	General Oil Co.
0	—	—	—	0	0	—	—	Giant Industries, Inc.
0	—	—	—	0	—	—	—	Globe Oil Co., USA
0	—	—	NA	0	—	—	NA	Golden Imperial, Inc.
0	—	—	0	0	—	—	—	Golub Service Stations
1	—	—	—	0	—	—	—	Great River Oil Co.
1	—	—	—	0	—	—	—	Gresham Petroleum Co.
0	—	—	285	4	4	—	0	Growmark, Inc.
3	3	—	—	1	1	—	—	Guttman Oil Co.
0	—	—	0	0	—	—	0	Harrell Petroleum Co.
1	—	—	0	0	—	—	0	Harris Enterprises, Inc.
—	—	—	—	—	—	—	—	Heathwood Oil Co.
—	—	—	—	0	—	—	—	Higgens Oil Co., Inc.
0	—	—	0	0	—	—	0	Highway Oil, Inc.
6	6	—	0	0	—	—	0	Angus J. Hines, Inc.
1	1	—	0	0	—	—	—	Hi-Quality Lo-Cost Svc. Stations, Inc.
1	1	0	2	0	—	—	0	Holland Oil Co.
0	—	—	—	0	—	—	0	Hop-In Food Stores, Inc.
—	—	—	—	—	—	—	—	Hudson Oil Co.
4	2	2	2	0	—	—	—	Hughes Oil Co.
0	—	—	0	0	—	—	—	Hull Oil Co.
2	0	2	3	1	1	0	0	Husky Oil Co.
0	—	—	—	0	—	—	—	J & L Oil, Inc.
0	—	—	—	0	—	—	—	J. S. & J. Service, Inc.
0	—	—	0	0	—	—	0	Johnson Products
9	1	3	—	0	—	—	—	Kelley-Williamson Co.
0	—	—	—	0	—	—	—	Kent Oil Co.
1	—	—	—	1	1	—	—	Kickapoo Oil Co., Inc.
0	—	—	0	0	—	—	0	Kimber-Allen Petroleum Corp.
1	0	0	1	0	—	—	0	Kimbro Oil Co.
—	—	—	—	—	—	—	—	Kirschner Bros. Oil Co.
1	—	—	0	0	—	—	0	Krause General Oil Corp.
0	—	—	—	0	—	—	—	The Kunz Oil Co.
0	—	—	0	0	—	—	0	Kwik Shop, Inc.
0	—	—	0	0	—	—	0	Lake Shore Oil Co.
2	2	—	0	2	2	—	—	Lehigh Oil Co., Inc.
0	—	—	0	—	—	—	—	Lerner Oil Co., Inc.
4	—	—	—	0	—	—	—	Lido Co. of New England
7	7	—	—	1	1	—	—	Main Bros. Oil Co., Inc.
1	1	—	—	0	—	—	0	Malco Products, Inc.
0	—	—	0	0	—	—	—	Marshall Oil Co.
2	2	—	NA	3	3	—	NA	Martin Oil Service, Inc.
NA	—	—	—	—	—	—	—	Mauger & Co.
1	1	—	—	—	—	—	—	McDowell Oil Service, Inc.
10	10	—	0	22	22	—	0	Meenan Oil Co., Inc.
—	—	—	—	—	—	—	—	Merit Oil Corp.
4	4	—	2	0	—	—	0	Merritt Truax, Inc.
0	—	—	0	0	—	—	0	Mico Oil Co., Inc.
168	168	—	168	2	2	—	0	Midland Cooperatives, Inc.
2	2	—	0	0	—	—	0	Mid-Missouri Oil Co.
2	2	—	2	0	—	—	—	Mid-States Petroleum, Inc.
1	—	—	0	0	—	—	0	Milder Oil Co.
0	—	—	—	0	—	—	—	Miller & Holmes, Inc.
0	—	—	—	0	—	—	—	The Miller Oil Co.
1	—	—	0	1	—	—	—	Monarch Oil & Supply Co.
NA	—	—	—	—	—	—	—	Munford, Inc.
0	—	—	0	0	—	—	0	Musket Corp.
0	—	—	0	0	—	—	0	National Convenience Stores, Inc.
0	—	—	—	0	—	—	0	Neal, Inc.
3	3	—	—	0	—	—	0	Newell Oil Co., Inc.
0	—	—	0	1	1	—	0	R. B. Newman Fuel Corp.
0	—	—	0	—	—	—	0	Oasis Petroleum Corp.
0	—	—	0	0	—	—	—	Pacer Oil Co.
9	9	—	0	1	1	—	0	Parker Oil Co., Inc.
3	1	2	NA	0	—	—	0	Curtis Parker Oil Co.
1	1	—	—	1	1	—	—	Peavey Oil Co.
0	—	—	—	0	—	—	—	Pester Corp.

(X) Total wholesale distributing plants, including terminals.
(*) Total branded retail outlets includes garages, motels, c-stores and service stations. By U.S. Census Bureau definition, only establishments earning 50% or more of their income from the sale of petroleum products are service stations.
(†) Total number of states where gasoline is branded includes District of Columbia.
Source: NPN questionnaires.

How Oil Companies Handle

				BRANDED SERVICE STATIONS				
INDEPENDENT OIL COMPANIES AND SELECTED OIL JOBBERS	TOTAL BRANDED RETAIL OUTLETS*	TOTAL NUMBER OF STATES WHERE GASOLINE BRAND IS MARKETED†	Total branded service stations	Supplied directly	Supplied through jobbers and commission agents	Lessee/ dealer operated	Salary operated	Commis-sion operated
Petroleum Sales & Service	100	1	100	100	—	95	5	—
Petroleum Oil Co. (xxx)	54	2	46	46	—	15	15	16
Phillips Fuel Co.	88	1	88	—	88	87	—	1
Piasa Motor Fuels, Inc.	22	2	16	22	—	16	6	—
Pilot Oil Corp.	94	8	94	94	—	—	94	—
Port Oil, Inc.	55	2	55	55	—	—	55	—
Powerine Oil Co.	39	2	39	39	—	—	39	—
Power Test Corp.	502	5	502	502	—	437	65	—
Premium Petroleum Products, Inc.	50	1	50	50	—	49	—	1
Pride of Texas Distributing Co., Inc.	29	1	29	29	—	27	2	—
Pride Oil Co., Inc. (Miss.)	25	2	25	25	—	33	1	21
Pride Oil Co., Inc. (Tenn.)	15	1	15	15	—	—	15	—
Private Brand Services, Inc.	5	1	5	4	1	—	5	—
Publix Oil Co., Inc.	101	5	101	101	0	101	8	93
W. H. Pugh Oil Co.	17	1	17	13	4	9	8	—
Quaker State Oil Refining Corp.	329	4	209	102	107	209	—	—
Quality Oil Co.	164	2	161	161	—	96	14	17
Racetrac Petroleum, Inc.	125	12	125	125	—	60	65	—
Red Hed Oil Co.	27	1	2	27	—	3	6	18
Reinhardt Oil Corp.	32	1	6	6	—	6	—	—
Remote Services, Inc. (xxx)	301	13	301	301	—	—	25	276
Reynolds Industries	12	2	19	12	—	7	12	—
River City Petroleum, Inc.	18	1	18	18	—	—	9	9
River Oil Co. (xxx)	32	2	24	—	24	23	1	—
Romanco, Inc.	187	6	112	112	—	60	52	—
Sahara Oil Co., Inc.	22	1	22	22	—	5	17	—
Santee Oil Co., Inc.	62	1	16	16	—	12	—	—
Schaeffer Oil	29	5	5	5	—	1	—	4(P)
Self-Service Oil Co.	19	4	19	19	—	—	19	—
Seminole Asphalt Refining Co.	26	3	26	26	—	—	—	26
Shelby Petroleum Corp.	20	2	20	20	—	—	20	—
Shotmeyer Bros. Petroleum Corp.	60	1	60	60	—	20	—	40
Shotmeyer Oil Corp.	41	3	41	41	—	3	—	38
The SICO Co.	155	4	91	75	16	65	26	—
Sigmor Corp.	577	20	577	577	0	0	577	0
Simon Oil Co., Inc.	65	1	65	65	—	56	9	—
Sing Oil Co. (xxx)	55	4	55	—	14	41	—	—
Smith-Shafer Oil Co.	10	3	10	10	—	—	8	2
SMO, Inc. (xxx)	120	2	120	120	1	91	22	7
Somerset Refinery (xxx)	46	9	—	—	—	—	—	—
South Central Oil Co. (xxx)	182	15	182	182	—	96	85	1
Southeastern Petroleum Sales Corp.	50	2	50	50	0	45	5	—
Southern Counties Oil Co.	5	1	5	—	5	—	5	—
Southern Union Refining Co. (xxx)	22	1	22	22	—	—	—	22
The Spencer Companies, Inc. (xxx)	84	1	—	—	—	—	—	—
M. Spiegel & Sons Oil Corp.	25	2	25	25	—	25	—	—
J. D. Street & Co., Inc.	356	5	—	—	—	—	—	—
Star Oil Co.	55	1	35	23	12	30	—	5
Star Service & Petroleum Co.	186	17	186	186	—	186	—	—
Suburban Propane Gas Co.	95	4	95	95	—	30	65	—
Sunny Service Stations, Inc.	15	1	11	—	11	3	8	—
Sunshine Jr. Stores, Inc.	307	5	307	57	250	—	—	—
Tanner Oil Co. (xxx)	90	3	80	80	—	4	75	1
Taylor Oil Co.	56	2	56	56	—	—	—	56
Texas Star Oil Co. (xxx)	75	1	75	75	—	—	40	35
Thornhill Oil Co., Inc.	20	1	20	20	—	—	5	—
Thornton Oil Corp.	100	18	100	100	—	—	100	—
Thriftyman Enterprises (xxx)	50	1	50	50	—	5	35	10
Time Oil Co.	211	5	211	211	—	—(T)	—(T)	—(T)
Tommy Oil Co.	36	12	36	—	36	—	36	—
Total Petroleum, Inc.	1,893	22	1,893	461	1,432	1,432	453	8
Travelers Petroleum, Inc.	79	3	79	79	0	0	79	0
Traux, Inc.	92	2	100(K)	100(K)	—	53	38	—
Trenton Oil Co.	50	1	100	—	50	40	—	10
United Refining Co.	—	—	—	—	—	—	—	—
Wake Up Oil Co., Inc.	42	1	42	42	—	0	42	0
Warelubco, Inc.	84	6	84	83	1	—	14	69
Webaco Oil Co.	14	1	18	14	3	1	—	—
Webb Oil Co.	19	2	—	—	—	—	—	—
Webster Oil Co.	35	1	20	20	—	31	4	—
Wesson	12	1	12	12	—	2	10	—
Western Marketing, Inc.	19	2	0	—	—	—	—	—
Wickland Oil Co.	86	3	84	84	—	—	84	—
A. T. Williams Oil Co.	65	2	65	65	—	—	65	—
J. H. Williams Oil Co., Inc.	81	1	72	67	5	67	4	1
York Oil Co., Inc.	14	1	14	14	—	—	14	—
Zepher, Inc.	84	2	71	—	—	—	—	—

(xxx) 1980 data: Company failed to respond to 1981 questionnaire.
(A) As of 12/21/81. Includes Prestige Stations, Inc.
(B) Company operated.
(C) Includes Fulcher & Martin.
(D) Includes 4 gas, 3 fuel oil, 5 chemical.
(E) Estimated
(F) Gasoline and distillates.
(G) Excluding two refineries.
(H) They are a Phillips Jobber.
(I) Most agents sell only propane.
(J) They are Jobbers.
(K) Percent.

Product Distribution (cont'd.)

			BRANDED JOBBERS				COMMISSION AGENTS			
				NUMBER SELLING . . .				NUMBER SELLING . . .		
100% full service	100% self service	Service and self service	Total	Gasoline only	Fuel oil only	Gasoline & fuel oil	Total	Gasoline only	Fuel oil only	Gasoline & fuel oil
10	20	70	—	—	—	—	—	—	—	—
43	3	6	0	—	—	—	0	—	—	—
80	—	—	0	—	—	—	0	—	—	—
12	—	10	0	—	—	—	0	—	—	—
4	90	—	0	—	—	—	0	—	—	—
9	38	8	0	—	—	—	0	—	—	—
—	39	—	0	—	—	—	0	—	—	—
477	25	—	0	0	0	0	0	0	0	0
50	—	—	0	—	—	—	0	—	—	—
6	12	11	0	—	—	—	0	—	—	—
24	—	1	0	—	—	—	0	—	—	—
8	8	7	0	—	—	—	0	—	—	—
1	4	—	0	—	—	—	0	—	—	—
10	67	25	0	—	—	—	0	—	—	—
11	6	—	—	—	—	—	2	—	—	2
197	12	—	36	—	—	36	0	—	—	—
20	32	109	0	—	—	—	0	—	—	—
75	50	—	0	—	—	—	0	—	—	—
4	23	0	2	2	—	—	0	—	—	—
—	—	6	0	—	—	—	—	—	—	—
26	276	—	0	—	—	—	0	—	—	—
11	1	—	0	—	—	—	0	—	—	—
—	18	—	0	—	—	—	0	—	—	—
3	11	20	1	1	—	—	0	—	—	—
0	110	2	0	—	—	—	0	—	—	—
2	17	3	0	—	—	—	0	—	—	—
3	3	10	0	—	—	—	0	—	—	—
—	—	—	—	—	—	—	4	—	—	4
—	19	—	0	—	—	—	—	—	—	—
—	26	—	0	—	—	—	0	—	—	—
20	—	—	0	—	—	—	0	—	—	—
60	—	—	NA	—	—	—	NA	—	—	—
41	—	—	0	—	—	—	0	—	—	—
73	14	4	7	—	—	7	57	57	—	—
14	563	—	0	—	—	—	0	—	—	—
58	7	—	0	—	—	—	0	—	—	—
—	38	17	0	—	—	—	0	—	—	—
1	8	1	0	—	—	—	0	—	—	—
20	20	80	—	—	—	—	6	6	—	—
—	—	—	—	—	—	—	—	—	—	—
97	85	—	0	—	—	—	1	1	—	—
—	40	10	0	—	—	—	0	—	—	—
—	5	—	1	1	—	—	0	—	—	—
—	22	—	0	—	—	—	0	—	—	—
—	—	—	—	—	—	—	—	—	—	—
20	%	5	0	—	—	—	0	—	—	—
—	—	—	—	—	—	—	—	—	—	—
20	5	10	2	—	—	2	0	—	—	—
22	37	127	0	—	—	—	0	—	—	—
—	96	—	0	—	—	—	0	—	—	—
—	—	11	1	—	—	1	0	—	—	—
—	307	—	9	—	—	—	29	—	—	29
17	7	56	0	—	—	—	0	—	—	—
—	52	4	0	—	—	—	0	—	—	—
—	75	—	0	—	—	—	0	—	—	—
6	6	8	—	—	—	—	—	—	—	—
—	100	—	0	—	—	—	0	—	—	—
—	50	—	—	—	—	—	—	—	—	—
0	211	—	—	—	—	—	—	—	—	—
20	1	15	0	—	—	—	0	—	—	—
300(E)	500(E)	1,193(E)	508	324	—	184	0	—	—	—
0	79	0	0	—	—	—	0	—	—	—
88	3	—	—	—	—	—	—	—	—	—
100	—	—	0	—	—	—	0	—	—	—
—	—	—	—	—	—	—	—	—	—	—
29	1	12	0	—	—	—	0	—	—	—
—	4	79	1	1	—	—	—	—	—	—
—	14	—	0	—	—	—	0	—	—	—
—	—	—	—	—	—	—	—	—	—	—
—	15	16	NA	—	—	—	NA	—	—	—
3	8	1	0	—	—	—	0	—	—	—
—	—	—	3	3	—	—	0	—	—	—
1	83	—	0	—	—	—	0	—	—	—
—	60	5	—	—	—	—	—	—	—	—
40	2	30	0	—	—	—	1	—	—	1
—	14	—	—	—	—	—	—	—	—	—
—	—	—	10	—	—	—	0	—	—	—

(L) Lease do not run.
(M) Majority of business not gasoline.
(N) Portion sell gasoline in Majik Div.
(O) 15 jointly owned.
(P) Owner/dealer operated.
(Q) Almost all.
(R) Proprietary.
(S) Direct supplied stations only. Data not available for jobber supplied.
(T) Confidential data.
(U) Non/Lessee dealer—Ship Store/PX—Jobber served non-dealer.
(V) Other, 4,598.
(W) Most.

BULK PLANTS				TERMINALS				
COMPANY OPERATED				COMPANY OPERATED				
Total	Salary operated	Commission operated	Jobber operated bulk plants	Total	Salary operated	Commission operated	Jobber operated terminals	INDEPENDENT OIL COMPANIES AND SELECTED OIL JOBBERS
—	—	—	—	—	—	—	—	**Petroleum Sales & Service**
2	2	—	—	0	—	—	—	**Petroleum Oil Co.**
0	—	—	—	1	1	—	—	**Phillips Fuel Co.**
1	—	—	NA	0	—	—	—	Piasa Motor Fuels, Inc.
0	—	—	—	0	—	—	—	Pilot Oil Corp.
0	—	—	0	0	—	—	—	Port Oil, Inc.
0	—	—	—	3	3	—	0	**Powerine Oil Co.**
0	0	0	0	2	2	0	0	**Power Test Corp.**
0	—	—	—	0	—	—	—	**Premium Petroleum Products, Inc.**
0	—	—	0	0	—	—	0	Pride of Texas Distributing Co., Inc.
0	—	—	0	0	—	—	0	Pride Oil Co., Inc. (Miss.)
1	1	—	1	0	—	—	0	Pride Oil Co., Inc. (Tenn.)
0	—	—	0	0	—	—	—	**Private Brand Services, Inc.**
0	—	—	—	0	—	—	—	**Publix Oil Co., Inc.**
2	—	2	—	1	1	—	—	**W. H. Pugh Oil Co.**
1	1	—	6	3	3	—	—	Quaker State Oil Refining Corp.
7	7	—	0	0	—	—	0	Quality Oil Co.
0	—	—	—	0	—	—	—	Racetrac Petroleum, Inc.
0	—	—	0	0	—	—	0	**Red Hed Oil Co.**
—	—	—	0	5	5	—	0	**Reinhardt Oil Corp.**
0	—	—	—	0	—	—	—	**Remote Services, Inc.**
0	—	—	0	0	—	—	0	Reynolds Industries
1	1	—	0	1	1	—	0	River City Petroleum, Inc.
1	—	—	—	0	—	—	—	River Oil Co.
1	1	0	0	0	0	0	0	**Romanco, Inc.**
2	2	—	0	0	—	—	0	**Sahara Oil Co., Inc.**
4	—	—	0	0	—	—	—	**Santee Oil Co., Inc.**
3	—	3	—	—	—	—	—	Schaeffer Oil
0	—	—	—	0	—	—	—	Self-Service Oil Co.
1	1	—	0	1	1	—	0	Seminole Asphalt Refining Co.
1	1	—	0	0	—	—	—	**Shelby Petroleum Corp.**
1	—	—	—	1	1	—	NA	**Shotmeyer Bros. Petroleum Corp.**
0	0	—	0	4	4	—	0	**Shotmeyer Oil Corp.**
19	19	—	—	1	1	—	—	The SICO Co.
0	0	0	0	4	4	0	0	Sigmor Corp.
0	—	—	0	0	—	—	—	Simon Oil Co., Inc.
0	—	—	—	0	—	—	—	**Siny Oil Co.**
1	1	—	0	0	—	—	0	**Smith-Shafer Oil Co.**
9	9	—	—	1	1	—	—	**SMO, Inc.**
—	—	—	—	—	—	—	—	Somerset Refinery
0	—	—	0	0	—	—	z8	South Central Oil Co.
0	—	—	0	0	—	—	—	Southeastern Petroleum Sales Corp.
2	2	—	0	0	—	—	0	**Southern Counties Oil Co.**
0	—	—	0	0	—	—	—	**Southern Union Refining Co.**
—	—	—	—	—	—	—	—	**The Spencer Companies, Inc.**
2	2	—	0	0	—	—	—	M. Spiegel & Sons Oil Corp.
—	—	—	—	2	2	—	—	J. D. Streett & Co., Inc.
1	1	—	2	0	—	—	2	Star Oil Co.
0	—	—	0	0	—	—	—	**Star Service & Petroleum Co.**
0	—	—	0	2	2	—	—	**Suburban Propane Gas Co.**
0	—	—	0	0	—	—	0	**Sunny Service Stations, Inc.**
0	—	—	0	0	—	—	—	Sunshine JR Stores, Inc.
0	—	—	0	0	—	—	—	Tanner Oil Co.
0	—	—	0	1	1	—	NA	Taylor Oil Co.
0	—	—	0	0	—	—	—	**Texas Star Oil Co.**
3	3	—	0	0	—	—	—	**Thornhill Oil Co., Inc.**
0	—	—	—	0	—	—	—	**Thornton Oil Corp.**
—	—	—	—	—	—	—	—	Thriftyman Enterprises
—	—	—	—	8	8	—	—	Time Oil Co.
NA	—	—	—	NA	—	—	NA	Tommy Oil Co.
0	—	—	—	8	8	—	0	**Total Petroleum, Inc.**
0	—	—	0	0	—	—	0	**Travelers Petroleum, Inc.**
—	8	1	—	0	—	—	—	**Traux, Inc.**
0	—	—	0	—	—	—	—	Trenton Oil Co.
—	—	—	—	—	—	—	—	United Refining Co.
0	—	—	NA	0	—	—	NA	Wake Up Oil Co., Inc.
—	—	—	—	0	—	—	—	**Warelubco, Inc.**
0	—	—	0	0	—	—	0	**Webaco Oil Co.**
—	—	—	—	—	—	—	—	**Webb Oil Co.**
2	2	—	NA	0	—	—	—	Webster Oil Co.
1	1	—	—	0	—	—	—	Wesson
2	2	—	0	0	—	—	—	Western Marketing, Inc.
0	—	—	0	1	1	0	—	**Wickland Oil Co.**
—	4	—	4	—	—	—	—	**A. T. Williams Oil**
4	3	1	0	0	—	—	0	**J. H. Williams Oil Co., Inc.**
3	3	—	—	—	—	—	—	York Oil Co., Inc.
3	—	3	—	2	2	—	0	Zepher, Inc.

(X) Total wholesale distributing plants, including terminals.

(*) Total branded retail outlets includes garages, motels, c-stores and service stations. By U.S. Census Bureau definition, only establishments earning 50% or more of their income from the sale of petroleum products are service stations.

(†) Total number of states where gasoline is branded includes District of Columbia.

Source: NPN questionnaires.

Branded Retail Outlets

Company	TOTAL BRANDED RETAIL OUTLETS	TOTAL NUMBER OF STATES WHERE GASOLINE BRAND IS MARKETED†	New England						Middle Atlantic		
			Maine	N.H.	Vt.	Mass.	R.I.	Conn.	N.Y.	N.J.	Pa.
Agway Petroleum Corp.	283	9	8	8	10	25	1	3	132	23	73
American Petrofina, Inc. (a)	4,014	20	—	—	—	—	—	—	—	—	—
Amoco Oil Co.	20,061	46	188	99	53	327	25	197	744	519	816
Armour Oil Co.	34	11	—	—	—	—	—	—	1	—	—
Ashland Oil, Inc. (xxx)	271	8	—	—	—	—	—	—	—	—	5
Atlantic Richfield Co. (c)	7,122(A)	30	—	25	60	318	109	212	480	257	1,844
Atlas Oil Co. of Utica	7	1	—	—	—	—	—	—	7	—	—
Automatic Comfort Corp.	54	1	—	—	—	—	—	54	—	—	—
Bagwell Oil Co. (d)	16	2	—	—	—	—	—	—	—	—	—
Best Oil, Inc.	19	1	—	—	—	—	—	—	—	—	19
Bi-Rite Development	21	1	—	—	—	—	—	—	—	—	21
Bonded Oil	247	4	—	—	—	—	—	—	—	—	—
Bray Terminals, Inc.	54	1	—	—	—	—	—	—	54	—	—
Browning Oil Co.	23	1	—	—	—	—	—	—	—	—	—
Bursaw Oil Corp. (xxx)	50	2	—	5	—	45	—	—	—	—	—
By-Lo Oil Co.	55	1	—	—	—	—	—	—	—	—	—
Cel Oil Products Corp. (e)	20	1	—	—	—	—	—	—	—	—	—
CENEX	1,001	11	—	—	—	—	—	—	—	—	—
Certified Oil Co.	215	3	—	—	—	—	—	—	—	—	—
Champion Petroleum Co. (xxx)	863	18	—	—	—	—	—	—	—	—	—
Charter Oil Co.	430	12	—	—	—	—	—	—	—	—	—
Cheker Oil Co.	405	18	—	—	—	—	—	—	—	—	10
Chevron U.S.A., Inc.	12,748	39	110	27	34	69	5	226	429	254	180
Citadel Corp.	11	3	—	—	—	—	—	—	—	—	—
Cities Service Co.	5,784	31	106	57	79	403	88	107	333	268	280
Coen Oil Co.	300	3	—	—	—	—	—	—	—	—	100
Colonial Oil Industries, Inc. (f)	465	6	—	—	—	—	—	—	—	—	—
Como Oil Co.	30	1	—	—	—	—	—	—	—	—	—
Conna Corp. (g)	310	13	—	10	16	—	—	6	17	—	—
Conoco, Inc.	4,885	28	—	—	—	—	—	—	—	—	—
Consumers Gasoline Stations	34	2	—	—	—	—	—	—	—	—	—
Consumers Oil Corp.	16	2	—	—	—	—	—	—	—	13	3
Crown Central Petroleum Corp.	215	9	—	—	—	—	—	—	30	14	2
Cray Energy, Inc.	47	3	1	24	22	—	—	—	—	—	—
Crystal Flash Petroleum Corp. (xxx)	36	2	—	—	—	—	—	—	—	—	—
Crystal U.S.A. Oil Co.	177	9	—	—	—	—	—	—	—	—	—
C.S.C. Oil Corp.	23	2	—	—	—	—	—	—	—	—	—
Dead River Co.	135	2	122	13	—	—	—	—	—	—	—
De Blois Oil Co. (ee)	43	2	—	—	—	8	35	—	—	—	—
Delta Marketing Co. (xxx)	252	9	—	—	—	—	—	—	—	—	—
Derby Refining Co.	550	12	—	—	—	—	—	—	—	—	—
Direct Oil Corp. (xxx)	156	10	—	—	—	—	—	—	—	—	—
Dividend Bonded Gas	12	3	—	—	—	—	—	—	—	—	—
Dixie Oil Co.	97	3	—	—	—	—	—	—	—	—	—
Dominion Oil Co.	28	1	—	—	—	—	—	—	—	—	—
Don Foster Oil Co.	48	1	—	—	—	—	—	—	—	—	—
Drake's Refinery Stations, Inc.	14	1	—	—	—	—	—	—	—	—	—
East Coast Oil Corp.	30	1	—	—	—	—	—	—	—	—	—
Elm City Filling Stations, Inc.	60	1	—	—	—	—	—	60	—	—	—
E.M. Bailey Dist. Co. (xxx)	135	2	—	—	—	—	—	—	—	—	—
Englefield Oil Co. (h)	134	2	—	—	—	—	—	—	—	—	—
Exxon Co., U.S.A.	20,585	40	283	134	109	330	49	194	978	922	1,193
Farm Stores, Inc.	60	1	—	—	—	—	—	—	—	—	—
Farmland Industries, Inc.	927	11	—	—	—	—	—	—	—	—	—
FCX, Inc.	106	2	—	—	—	—	—	—	—	—	—
Fireline Petroleum	407	10	19	25	—	104	36	50	47	25	4
Fiaca Oil Co., Inc.	104	23	—	—	—	—	1	3	—	4	10
Don Foster Oil Co.	39	1	—	—	—	—	—	—	—	—	—
Gas-N-Go, Inc.	1	1	—	—	—	—	—	—	—	—	—
Getty Refining & Marketing Co.	4,700	28	120	52	75	268	51	156	625	472	222
Globe Oil Co., U.S.A (xxx)	59	4	—	—	—	—	—	—	—	—	—
Golden Imperial	47	1	—	—	—	—	—	—	—	—	—
Golub Service Station Corp.	15	2	—	—	—	1	—	—	14	—	—
Great River Oil Co.	88	2	—	—	—	—	—	—	—	—	—
Gresham Petroleum Co.	15	1	—	—	—	—	—	—	—	—	—
Growmark, Inc. (xxx)	160	4	—	—	—	—	—	—	—	—	—
Gulf Oil Corp.	13,870	30	195	91	76	352	72	111	983	637	730
Guttman Oil Co. (xxx)	75	3	—	—	—	—	—	—	—	—	NA
Higgins Oil Co., Inc.	22	1	—	—	—	—	—	—	—	—	—
Highway Oil, Inc. (xxx)	223	26	—	2	2	—	—	—	23	—	29
Angus J. Hines, Inc.	103	1	—	—	—	—	—	—	—	—	—
Holland Oil Co. (xxx)	34	1	—	—	—	—	—	—	—	—	—
Hop-In Food Stores, Inc.	134	3	—	—	—	—	—	—	—	—	—
Hudson Oil Co. (xxx)	305	29	—	—	—	—	—	—	16	—	8
Huges Oil Co.	123	2	—	—	—	—	—	—	—	—	—
Hull Oil Co.	15	2	—	—	—	—	—	—	—	—	—

(xxx) 1980 data: Companies failed to respond to 1981 questionnaire.

(a) Includes American Petrofina Marketing, Inc., Dujax Fina Oil Co., Porto Fina Oil Co., & Tambay Fina Oil Co.

(b) Includes Gasamat Oil Corp. of Colorado.

(c) Includes Prestige Stations, Inc. Data as of 12/21/81.

(d) Includes Fulcher & Martin.

(e) Includes Gas-Up, Inc.

(f) Includes Colonial Interstate, Inc. & Interstate Stations, Inc.

(g) Includes Convenient Gasoline & Petro Oil Co.

(h) Includes Eagle Oil Co., Morral Oil Co., & River Oil Co.

(i) Includes Flying J, Vista, & Westland.

(j) Includes Jr. Food Mart of Texas, Inc.

(k) Includes North Iowa Oil & Tri-Iowa Oil.

(l) Subsidiary or affiliated. Includes Martin-4-Min. Auto Salon, Inc. & Martin Oil of Indiana, Inc.

(m) Includes Peninsular Petroleum Co.

(n) Includes Stop-N-Go, Hot Stop, Shop-N-Go, & PDO.

(o) Includes Barach-Fords Oils, & City Oil Co.

(p) Includes Pester Marketing Northern, & Pester Marketing Southern.

(q) Includes Aero Oil Co.

in the United States

South Atlantic									East North Central					East South Central			
Del.	Md.	D.C.	Va.	W.Va.	N.C.	S.C.	Ga.	Fla.	Ohio	Ind.	Ill.	Mich.	Wis.	Ky.	Tenn.	Ala.	Miss.
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	94	199	606	578	—	—	3	—	—	1	160	109	29
37	396	51	810	358	1,205	560	896	793	520	796	1,491	1,156	687	145	953	889	436
—	—	—	3	—	—	—	—	—	1	—	1	—	—	—	—	—	—
—	—	—	2	42	—	—	—	—	62	5	2	—	—	135	—	—	—
86	163	5	264	48	1	—	—	—	213	108	366	92	69	—	2	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	1	—	15	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	13	—	—	—	—	165	38	—	—	—	31	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	23	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	55	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	15	—	—	—	—	—
—	—	—	—	—	—	20	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	124	—	—	—	—
—	—	—	—	14	—	—	—	—	196	—	—	—	—	5	—	—	—
—	—	—	—	—	—	—	—	—	—	43	9	2	3	9	6	—	—
—	—	—	13	2	11	7	12	59	—	—	—	—	—	29	9	10	71
—	1	—	—	—	—	—	5	44	9	72	48	47	9	9	3	2	5
17	49	2	13	57	52	117	1,234	1,215	4	8	0	0	0	1,170	107	1,209	689
—	2	8	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	119	2	201	5	570	197	306	599	35	161	215	57	216	4	227	531	156
—	—	—	—	15	—	—	—	—	185	—	—	—	—	—	—	—	—
—	—	—	—	—	24	201	213	1	—	—	—	—	—	—	15	1	—
—	—	—	—	—	—	—	—	30	—	—	—	—	—	—	—	—	—
—	—	—	—	—	15	—	—	13	16	23	29	—	—	141	19	—	—
—	—	—	—	—	—	—	—	2	—	49	127	17	133	27	—	23	46
—	—	—	—	—	—	—	—	—	—	—	—	—	—	6	28	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	45	—	37	—	21	4	47	—	—	—	—	—	—	—	—	15	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	16	—	20	—	—	—	—	—
—	—	—	—	—	—	—	3	40	—	—	—	—	—	1	14	84	15
—	—	—	—	—	—	—	—	—	14	—	—	—	—	9	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	1	9	12	—	—	—	—	—	32	101	40	7
—	—	—	8	4	15	11	2	52	—	—	—	—	—	10	32	18	4
—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—
—	—	—	—	—	—	—	65	30	—	—	—	—	—	—	—	2	—
—	—	—	28	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	48	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	14	—	—	—	—	—
—	—	—	30	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	5	—	—	130	—	—	—
—	—	—	—	—	—	—	—	—	102	—	—	32	—	—	—	—	—
74	531	60	1,183	546	2,104	1,083	725	611	182	2	—	—	—	206	1,094	478	267
—	—	—	—	—	—	—	—	60	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	90	16	—	—	—	—	—	—	—	—	—	—	—
4	—	—	—	—	—	—	—	93	—	—	—	—	—	—	—	—	—
—	5	—	13	—	—	—	4	—	6	1	5	9	2	1	1	1	—
—	—	—	—	—	—	—	—	—	—	—	—	39	—	—	—	—	—
—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—
77	78	—	—	—	—	—	—	—	—	—	98	6	125	—	—	—	—
—	—	—	—	—	2	10	40	7	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	47	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	4	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15
—	—	—	—	—	—	—	—	—	—	—	89	—	10	—	—	—	—
33	223	31	816	331	1,195	603	1,070	710	617	50	—	220	—	582	955	745	560
—	—	—	—	NA	—	—	—	—	NA	—	—	—	—	—	—	—	—
—	—	—	22	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	4	—	—	7	—	—	2	30	33	8	1	3	—	8	7	2	2
—	—	—	103	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—
—	—	—	70	—	43	—	—	—	—	—	—	—	—	—	21	—	—
—	6	—	5	1	—	—	9	25	7	12	5	8	12	4	4	8	1
—	—	—	—	—	—	—	(x)	(x)	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	13	—	—	—	—	—	—	—	2	—

(r) Includes Sylvarin Oil, & White Flash Oil.
(s) Includes Q Oil Co. of Elizabeth City, Greenville, Hickory, Mt. Airy, Salisbury, Statewide, Southern Pines, Inc., & Gas House Company.
(t) Includes Corner Food Stores, Inc.
(u) Includes Masoil, Inc., Thrifty Petroleum, Camellia State Petroleum, & Maverick Oil, Inc.
(v) Includes Lil' Feller.
(w) Includes John G. Stumpf, Inc.
(x) Company markets in these states, but numbers are not available.
(y) Includes Autotronic Systems, Inc.
(z) Includes Omega Oil Co. (62).

(aa) Includes Boron Oil Company & BP Oil Inc.
(bb) Includes Etna Service Stations.
(cc) Includes Direct Oil Corp., Q-S Petroleum, Inc., Red Diamond Oil Company, & TLC Oil Company.
(dd) Includes Town Pump, & Gas-A-Matic.
(ee) Includes Beacon Oil Co.
(ff) Includes Sello, Reelo; Hi-Val, Big-Bi; & Lo-Lo.
(A) Estimated.
(B) Numbers not available.
Source: NPN questionnaires
†Includes District of Columbia

Branded Retail Outlets (cont'd.)

Company	TOTAL BRANDED RETAIL OUTLETS	TOTAL NUMBER OF STATES WHERE GASOLINE BRAND IS MARKETED†	New England						Middle Atlantic		
			Maine	N.H.	Vt.	Mass.	R.I.	Conn.	N.Y.	N.J.	Pa.
Johnson Products	95	6	45	20	5	10	5	—	10	—	—
J. & L. Oil, Inc. (xxx)	90	8	—	—	—	—	—	—	6	—	—
Kelley-Williamson Co. (xxx)	50	2	—	—	—	—	—	—	—	—	—
Kerr-McGee Refining Corp. (xxx)	1,431	17	—	—	—	—	—	—	—	—	—
Key Petroleum, Inc.	398	6	—	—	—	—	—	—	—	—	—
Kickapoo Oil Co., Inc.	70	1	—	—	—	—	—	—	—	—	—
Kimber-Allen Petroleum Corp.	150	1	—	—	—	—	—	—	—	150	—
Kimbro Oil	40	1	—	—	—	—	—	—	—	—	—
Kirschner Bros. Oil Co. (xxx)	50	2	—	—	—	—	—	—	—	15	35
Lake Shore Oil Co.	30	1	—	—	—	—	—	—	—	—	—
Lehigh Oil Co., Inc. (xxx)	26	4	—	4	4	—	6	12	—	—	—
Lido Co., of New England	108	3	58	28	—	22	—	—	—	—	—
Main Bros. Oil Co., Inc.	30	1	—	—	—	—	—	—	30	—	—
Marathon Oil Co.	2,146	6	—	—	—	—	—	—	—	—	—
Marshall Oil Co.	50	1	—	—	—	—	—	—	—	—	—
Martin Oil Service, Inc. (l)	146	13	—	—	—	—	—	—	—	3	—
Mauger & Co. (xxx)	66	3	—	—	—	—	—	—	—	—	63
McDowell Oil Service, Inc	28	1	—	—	—	—	—	—	—	—	28
Merit Oil Corp.	—(B)	11	—	(x)	—	(x)	(x)	(x)	(x)	(x)	(x)
Mico Oil Co., Inc.	28	14	—	—	—	—	—	—	—	1	—
Midland Cooperatives, Inc.	276	5	—	—	—	—	—	—	—	—	—
Mid-States Petroleum, Inc.	46	2	—	—	—	—	—	—	—	—	—
Miller Enterprises, Inc. (m)	90	1	—	—	—	—	—	—	—	—	—
Miller & Holmes, Inc.	29	10	—	—	—	—	—	—	1	—	—
The Miller Oil Co.	12	2	—	—	—	—	—	—	—	—	—
Mobil Oil Corp. (ff)	16,564	45	255	161	127	698	97	496	2,173	458	1,273
Monarch Oil & Supply Co.	25	1	—	—	—	—	—	—	—	—	—
Munford, Inc.	463	13	—	—	—	—	—	—	—	—	—
Murphy Oil Corp.	767	14	—	—	—	—	—	—	—	—	—
National Convenience Stores, Inc. (n)	131	39	(x)	(x)	(x)	(x)	(x)	(x)	(x)	(x)	(x)
R.B. Newman Fuel Corp.	12	1	—	—	—	—	—	—	12	—	—
Oasis Petroleum Corp. (xxx)	104	20	5	—	—	—	2	—	1	—	1
Parker Oil Co., Inc. (o)	175	2	—	—	—	—	—	—	—	—	—
Penna. Petroleum Products Co. (xxx)	1,558	20	120	67	50	275	35	30	160	110	160
Pester Corp. (p)	221	10	—	—	—	—	—	—	—	—	—
Petroleum Sales & Service	100	1	—	—	—	—	—	—	100	—	—
Phillips Fuel Co.	88	1	—	—	—	—	—	—	—	88	—
Phillips Petroleum Co. (q)	12,327	38	—	—	—	—	—	—	—	—	148
Piasa Motor Fuels, Inc.	22	2	—	—	—	—	—	—	—	—	—
Pilot Oil Corp.	94	8	—	—	—	—	—	—	—	—	—
Port Oil, Inc.	55	2	—	—	—	—	—	—	—	—	—
Power Test Corp.	502	5	—	—	—	28	—	28	382	62	2
Premium Petroleum Products, Inc.	50	1	—	—	—	—	—	—	50	—	—
Pride Brand Services, Inc.	5	1	—	—	—	—	—	—	—	—	—
Pride Oil Co., Inc. (Miss.)	25	2	—	—	—	—	—	—	—	—	—
Pride Oil Co., Inc. (Tenn.)	15	1	—	—	—	—	—	—	—	—	—
Publix Oil Co., Inc.	101	5	—	—	—	—	—	—	—	—	—
W.H. Pugh Oil Co. (r)	17	1	—	—	—	—	—	—	—	—	—
Quaker State Oil Ref. Corp.	329	4	—	—	—	—	—	—	46	—	171
Quality Oil Co. (s)	164	2	—	—	—	—	—	—	—	—	—
Racetrac Petroleum, Inc.	125	12	—	—	—	—	—	—	—	—	—
Red Hed Oil Co.	27	1	—	—	—	—	—	—	—	—	—
Reinhardt Oil Corp. (t)	32	1	—	—	—	—	—	—	32	—	—
Remote Services, Inc. (xxx)	301	13	—	10	16	—	—	6	16	—	—
Research Fuels, Inc. (xxx)	74	8	—	—	—	—	—	—	—	—	—
Reynolds Industries	12	2	2	—	—	10	—	—	—	—	—
Rich Distributors, Inc. (xxx)	37	3	—	—	—	—	—	—	—	—	—
River Oil Co. (xxx)	32	2	—	—	—	—	—	—	—	—	—
Romaco, Inc. (u)	187	6	—	—	—	—	—	—	—	—	—
Santee Oil Co., Inc.	62	1	—	—	—	—	—	—	—	—	—
Sav-Mor Oil Co.	100	14	—	—	—	—	—	—	1	1	—
Self Service Oil Co.	19	4	—	—	—	—	—	—	—	—	—
Seminole Asphalt Refining Co.	26	3	—	—	—	—	—	—	—	—	—
Shelby Petroleum Corp.	20	2	—	—	—	—	—	—	—	—	—
Shell Oil Co.	13,665	36	—	9	—	211	49	149	361	224	11
Shotmeyer Bros. Petroleum Corp.	60	1	—	—	—	—	—	—	—	60	—
Shotmeyer Oil Corp.	41	3	—	—	—	—	—	—	1	39	—
The Sico Co. (w)	155	4	—	—	—	—	—	—	—	1	145
Sigmor Corp. (y)	577	20	—	—	—	—	—	—	4	—	18
Simon Oil Co., Inc.	65	1	—	—	—	—	—	—	65	—	—
Sing Oil Co. (xxx)	55	4	—	—	—	—	—	—	—	—	—
Smith-Shafer Oil Co.	10	3	—	—	—	—	—	—	—	—	—
Smo, Inc. (xxx)	120	2	—	—	—	—	—	—	—	—	—
Somerset Refinery (xxx)	46	2	—	—	—	—	—	—	—	—	—
South Central Oil Co. (xxx)	182	16	—	—	—	—	—	—	—	—	—
Southeastern Petroleum Sales Corp.	50	2	—	—	—	—	—	—	—	—	—
The Spencer Companies, Inc. (xxx)	84	1	—	—	—	—	—	—	—	—	—
M. Spiegel & Sons Oil Corp.	25	2	—	—	—	—	—	—	23	2	—
The Standard Oil Co. (Ohio) (aa)	3,965	19	(x)	(x)	(x)	(x)	(x)	(x)	(x)	(x)	(x)
J. D. Streett & Co., Inc.	356	5	—	—	—	—	—	—	—	—	—
Star Oil Co.	55	1	—	—	—	—	—	—	—	—	—

(xxx) 1980 data: Companies failed to respond to 1981 questionnaire.

(a) Includes American Petrofina Marketing, Inc., Dujax Fina Oil Co., Porto Fina Oil Co., & Tambay Fina Oil Co.

(b) Includes Gasamat Oil Corp. of Colorado.

(c) Includes Prestige Stations, Inc. Data as of 12/21/81.

(d) Includes Fulcher & Martin.

(e) Includes Gas-Up, Inc.

(f) Includes Colonial Interstate, Inc. & Interstate Stations, Inc.

(g) Includes Convenient Gasoline & Petro Oil Co.

(h) Includes Eagle Oil Co., Morral Oil Co., & River Oil Co.

(i) Includes Flying J, Vista, & Westland.

(j) Includes Jr. Food Mart of Texas, Inc.

(k) Includes North Iowa Oil & Tri-Iowa Oil.

(l) Subsidiary or affiliated. Includes Martin-4-Min. Auto Salon, Inc. & Martin Oil of Indiana, Inc.

(m) Includes Peninsular Petroleum Co.

(n) Includes Stop-N-Go, Hot Stop, Shop-N-Go, & PDO.

(o) Includes Barach-Fords Oils, & City Oil Co.

(p) Includes Pester Marketing Northern, & Pester Marketing Southern.

(q) Includes Aero Oil Co.

South Atlantic									East North Central					East South Central			
Del.	Md.	D.C.	Va.	W.Va.	N.C.	S.C.	Ga.	Fla.	Ohio	Ind.	Ill.	Mich.	Wis.	Ky.	Tenn.	Ala.	Miss.
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	8	—	—	2	57	—	14	3	—	—	—
—	—	—	—	—	—	—	—	—	—	—	45	—	5	—	—	—	—
—	—	—	—	—	—	—	—	—	—	59	125	—	94	1	14	—	16
—	—	—	—	—	—	—	20	208	—	—	1	1	—	—	—	63	39
—	—	—	—	—	—	—	—	—	—	—	—	—	70	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	40	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	30	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	635	589	278	506	18	120	—	—	—
—	—	—	—	—	50	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	7	—	33	22	49	13	5	—	—	—	—
2	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(x)	(x)	(x)	(x)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	1	—	—	—	—	—	8	—	3	1	—	1	1	1	1
—	—	—	—	—	—	—	—	—	—	—	—	10	115	—	—	—	—
—	—	—	—	—	—	—	—	—	—	1	—	45	—	—	—	—	—
—	—	—	—	—	—	—	—	90	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	1	—	—	—	1	1	—	—	—	—
—	—	—	—	—	—	—	—	—	10	—	—	2	—	—	—	—	—
38	151	2	185	34	432	66	69	323	349	243	618	807	712	30	431	42	1
—	—	—	—	—	—	—	—	—	—	25	—	—	—	—	—	—	—
—	—	—	24	—	15	45	94	72	—	—	—	—	—	8	21	32	26
—	—	—	14	—	23	13	53	170	—	—	—	35	87	14	74	141	26
(x)	(x)	(x)	(x)	(x)	(x)	(x)	—	—	(x)	(x)	(x)	(x)	(x)	—	(x)	(x)	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	2	—	3	—	4	1	6	18	21	—	12	—	—	1	1	5	1
—	—	—	170	—	5	—	—	—	—	—	—	—	—	—	—	—	—
27	138	40	27	—	50	45	14	14	60	120	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	1	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	122	—	367	34	959	459	383	577	137	500	591	144	302	159	457	335	267
—	—	—	—	—	—	—	—	—	—	—	20	—	—	—	—	—	—
—	—	—	14	1	9	—	11	10	—	—	—	—	—	10	37	2	—
—	—	—	—	—	20	36	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	5	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	22
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15	—	—
—	—	—	1	—	—	2	15	—	—	—	—	—	—	4	79	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	17	—	—	—	—
—	—	—	—	52	—	—	—	—	60	—	—	—	—	—	—	—	—
—	—	—	3	—	161	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	5	—	4	4	29	23	—	—	—	—	—	—	5	38	2
—	—	—	—	—	—	—	—	—	—	—	—	—	—	27	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	16	—	—	11	14	20	27	—	—	142	19	—	—
—	—	—	—	—	2	2	2	—	—	—	—	—	—	—	6	8	2
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	17	—	—	—	—	10	—	—	—	—	10	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA
—	—	—	—	—	—	2	40	9	—	—	—	—	—	—	8	125	3
—	—	—	—	—	—	62	—	—	—	—	—	—	—	—	—	—	—
—	—	—	1	—	—	—	—	—	—	—	—	—	—	1	—	—	—
—	—	—	—	—	—	—	—	—	—	—	3	—	9	—	—	—	—
—	—	—	—	—	—	—	2	21	—	—	—	—	—	—	—	3	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	11	9	—	—
1	164	13	102	—	1	1	67	365	329	201	475	299	64	51	60	54	2
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
8	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	19	—	2	4	2	4	—	—	—	3	—	1	5	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	43	8	—	—	—	—	—	—	—	1	3
—	—	—	—	—	—	—	—	2	—	—	6	—	2	—	—	—	—
15	105	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	1	—	—	—	42	3	—	—
—	—	—	—	—	—	—	—	2	—	16	8	3	4	9	22	5	24
—	—	—	—	—	—	30	20	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	84	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(x)	(x)	(x)	(x)	(x)	(x)	—	—	—	(x)	(x)	—	(x)	—	(x)	—	—	—
—	—	—	—	—	—	—	—	—	1	—	143	—	—	29	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	55	—	—	—	—	—

(r) Includes Sylvarin Oil, & White Flash Oil.

(s) Includes Q Oil Co. of Elizabeth City, Greenville, Hickory, Mt. Airy, Salisbury, Statewide, Southern Pines, Inc., & Gas House Company.

(t) Includes Corner Food Stores, Inc.

(u) Includes Masoil, Inc., Thrifty Petroleum, Camellia State Petroleum, & Maverick Oil, Inc.

(v) Includes Lil' Feller.

(w) Includes John G. Stumpf, Inc.

(x) Company markets in these states, but numbers are not available.

(y) Includes Autotronic Systems, Inc.

(z) Includes Omega Oil Co. (62).

(aa) Includes Boron Oil Company & BP Oil Inc.

(bb) Includes Etna Service Stations.

(cc) Includes Direct Oil Corp., Q-S Petroleum, Inc., Red Diamond Oil Company, & TLC Oil Company.

(dd) Includes Town Pump, & Gas-A-Matic.

(ee) Includes Beacon Oil Co.

(ff) Includes Sello, Reelo; Hi-Val, Big-Bi; & Lo-Lo.

(A) Estimated.

(B) Numbers not available.

Source: NPN questionnaires

†Includes District of Columbia

Branded Retail Outlets (cont'd.)

Company	TOTAL BRANDED RETAIL OUTLETS	TOTAL NUMBER OF STATES WHERE GASOLINE BRAND IS MARKETED†	New England						Middle Atlantic		
			Maine	N.H.	Vt.	Mass.	R.I.	Conn.	N.Y.	N.J.	Pa.
Star Service & Petroleum Co.	186	17	—	—	—	—	—	—	—	—	—
Sun Co.	8,361	33	93	70	57	340	82	137	986	632	997
Sunmark Industries (xxx)	9,433	37	88	65	38	344	87	135	1,004	654	1,056
Sunshine JR Stores, Inc.	307	5	—	—	—	—	—	—	—	—	—
Tanner Oil Co. (xxx)	90	3	—	—	—	—	—	—	—	—	—
Taylor Oil Co. (bb)	56	2	—	—	—	—	—	—	—	—	—
Tenneco Oil Co. (cc)	484	17	—	—	—	1	—	3	1	—	1
Texaco Inc.	22,490	50	230	112	96	552	133	331	911	537	1,346
Thornhill Oil Co., Inc.	20	1	—	—	—	—	—	—	—	—	—
Thornton Oil Corp.	100	18	—	—	—	—	—	4	5	1	1
Tommy Oil Co., Inc.	36	12	—	—	—	—	—	—	5	—	7
Total Petroleum, Inc.	1,893	22	—	—	—	—	—	—	—	—	—
Travelers Petroleum, Inc.	79	3	—	—	—	—	—	—	—	—	—
Trenton Oil Co.	50	1	—	—	—	—	—	—	—	50	—
Tresler Oil Co. (xxx)	150	4	—	—	—	—	—	—	—	—	—
Union Oil Co. of Calif.	12,529	44	—	—	—	—	—	2	1	2	30
United Refining Co. (xxx)	691	4	—	—	—	—	—	—	226	—	399
Wake Up Oil Co.	42	1	—	—	—	—	—	—	—	—	—
Wareub Co., Inc.	84	6	—	—	—	—	—	—	—	—	—
Warren Equities	275	8	4	10	—	47	35	55	26	65	33
Webb Oil Co.	19	2	—	—	—	—	—	—	—	—	—
Wesson	12	1	—	—	—	—	—	12	—	—	—
A. T. Williams Oil	65	2	—	—	—	—	—	—	—	—	—
J. H. Williams Oil Co., Inc.	81	1	—	—	—	—	—	—	—	—	—
York Oil Co., Inc.	14	1	—	—	—	—	—	—	—	—	—
Zephyr, Inc.	84	2	—	—	—	—	—	—	—	—	—

Company	TOTAL BRANDED RETAIL OUTLETS	TOTAL NUMBER OF STATES WHERE GASOLINE BRAND IS MARKETED†	West North Central						
			Minn.	Iowa	Mo.	N.D.	S.D.	Neb.	Kan.
Ada Resources	207	1	—	—	—	—	—	—	—
American Petrofina, Inc. (a)	4,014	20	—	31	162	—	1	20	151
Amoco Oil Co.	20,061	46	665	425	591	154	270	217	316
Apollo Oil Co.	13	1	—	—	—	—	—	—	—
Arkla Chemical Corp.	7	3	—	—	—	—	—	—	—
Armour Oil Co.	34	11	—	—	—	—	—	—	—
Asamera Oil, Inc. U.S. (b)	110	11	—	—	—	—	—	1	—
Ashland Oil Co. of California	14	1	—	—	—	—	—	—	—
Atlantic Richfield Co. (c)	7,122(A)	30	—	—	1	—	—	—	—
Brennan Petroleum Products	3	1	—	—	—	—	—	—	—
Beacon Oil Co.	267	2	—	—	—	—	—	—	—
Caribou Four Corners	60	10	—	—	—	—	—	—	—
CENEX	1,001	11	213	—	—	173	114	1	—
Champlin Petroleum Co. (xxx)	863	18	212	30	—	173	114	10	—
Charter Oil Co.	430	12	—	—	—	—	—	—	—
Cheker Oil Co.	405	18	—	8	27	—	—	3	—
Chevron U.S.A., Inc.	12,748	39	0	0	0	0	0	4	0
Circle K Corp. (xxx)	736	11	—	—	—	—	—	—	—
Cities Service Co.	5,784	31	—	—	1	—	—	—	—
Conna Corp. (g)	310	13	—	2	—	—	—	—	3
Conoco, Inc.	4,885	28	175	236	303	25	48	268	209
Consumers, Inc. (xxx)	35	4	—	5	—	—	—	—	2
Cook & Cooley, Inc.	85	1	—	—	—	—	—	—	—
Crystal U.S.A. Oil Co.	177	9	—	—	—	—	—	—	—
Curtis Oil Co., Inc. (xxx)	47	1	—	—	—	—	—	—	—
Delta Marketing Co.	252	9	—	—	—	—	—	—	—
Derby Refining Co.	550	12	9	114	109	—	3	46	172
Desert Oil Co.	6	1	—	—	—	—	—	—	—
Desert Petroleum, Inc.									
Diamond Shamrock Corp.	1,579	12	—	—	—	—	—	—	16
Dividend Bonded Gas	12	3	—	5	—	—	—	6	—
Exxon Co. U.S.A.	20,585	40	—	—	—	70	8	2	—
Farmland Industries, Inc.	927	11	112	184	51	100	40	160	211
Fisca Oil Co., Inc.	104	23	1	2	5	—	1	3	2
Franko Oil Co.	104	3	—	—	—	—	—	—	—
Flying J, Inc. (i)	86	9	—	—	—	7	—	—	—
FS Services, Inc. (xxx)	160	4	2	59	—	—	—	—	—
Gasco Gasoline	134	1	—	—	—	—	—	—	—
General Oil Co.	54	2	—	—	4	—	—	—	—
Getty Refining & Marketing Co.	4,700	28	312	344	461	41	38	163	334
Giant Industries, Inc. (xxx)	20	3	—	—	—	—	—	—	—
Great River Oil co. (xxx)	88	2	—	—	84	—	—	—	—
Growmark, Inc. (xxx)	160	4	2	59	—	—	—	—	—
Gulf Oil Corp.	13,870	30	—	—	—	—	—	—	—

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(a) Includes American Petrofina Marketing, Inc., Dujax Fina Oil Co., Porto Fina Oil Co., & Tambay Fina Oil Co.

(b) Includes Gasamat Oil Corp. of Colorado.

(c) Includes Prestige Stations, Inc. Data as of 12/21/81.

(d) Includes Fulcher & Martin.

(e) Includes Gas-Up, Inc.

(f) Includes Colonial Interstate, Inc. & Interstate Stations, Inc.

(g) Includes Convenient Gasoline & Petro Oil Co.

(h) Includes Eagle Oil Co., Morral Oil Co., & River Oil Co.

(i) Includes Flying J, Vista, & Westland.

(j) Includes Jr. Food Mart of Texas, Inc.

(k) Includes North Iowa Oil & Tri-Iowa Oil.

(l) Subsidiary or affiliated. Includes Martin-4-Min. Auto Salon, Inc. & Martin Oil of Indiana, Inc.

(m) Includes Peninsular Petroleum Co.

(n) Includes Stop-N-Go, Hot Stop, Shop-N-Go, & PDO.

(o) Includes Barach-Fords Oils, & City Oil Co.

(p) Includes Pester Marketing Northern, & Pester Marketing Southern.

(q) Includes Aero Oil Co.

South Atlantic									East North Central					East South Central			
Del.	Md.	D.C.	Va.	W.Va.	N.C.	S.C.	Ga.	Fla.	Ohio	Ind.	Ill.	Mich.	Wis.	Ky.	Tenn.	Ala.	Miss.
—	—	—	—	(x)	(x)	(x)	(x)	(x)	(x)	—	—	—	—	(x)	(x)	(x)	(x)
38	232	20	190	124	429	304	60	209	865	353	348	471	—	233	66	60	—
28	203	20	191	98	459	274	62	206	926	418	376	481	44	282	216	61	30
—	—	—	—	—	—	—	20	122	—	—	—	—	—	—	—	126	29
—	—	—	—	25	—	—	—	—	40	—	—	—	—	25	—	—	—
—	—	—	9	—	47	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	12	4	29	45	61	130	—	—	—	—	—	11	54	23	10
69	403	22	1,330	50	1,260	574	768	424	20	329	674	107	77	379	841	835	529
—	—	—	—	—	—	—	—	—	20	—	—	—	—	—	—	—	—
—	1	—	6	1	12	4	5	7	11	11	7	2	—	12	3	—	—
—	1	—	1	1	—	—	1	4	9	—	—	—	—	—	1	1	—
—	—	—	—	—	—	—	—	—	3	5	13	520	30	3	21	5	—
—	—	—	—	—	—	66	8	5	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
									NA	NA	—	—	—	NA	NA	—	—
27	40	—	558	213	1,083	415	730	852	596	395	343	552	351	155	572	1,214	504
3	—	—	—	—	—	—	—	—	63	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	42	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	8	—	4	54	—	—	—	1	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	1	—	—	—	18	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	25	—	40	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	81	—	—	—	—	—	—	—	—	—
—	—	—	14	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	80	4	—	—	—	—

West South Central				Mountain								Pacific				
Ark.	La.	Okla.	Texas	Mont.	Idaho	Wyo.	Colo.	N.M.	Ariz.	Utah	Nev.	Wash	Ore.	Calif.	Alaska	Hawaii
—	—	—	207	—	—	—	—	—	—	—	—	—	—	—	—	—
151	89	142	1,347	—	—	—	—	139	2	—	—	—	—	—	—	—
295	725	75	411	118	100	110	279	18	—	116	3	18	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	13	—	—
4	2	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	1	—	—	—	1	—	—	—	—	1	1	1	22	—	1
—	—	—	—	5	6	10	38	11	5	10	3	10	—	11	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	14	—	—
—	—	—	—	—	2	—	—	3	51	14	47	403	321	1,503	—	55
—	—	—	—	—	—	—	—	—	3	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	5	262	—	—
—	—	—	—	4	13	14	1	5	7	8	4	1	3	—	—	—
—	—	—	—	129	56	9	—	—	—	19	—	103	60	—	—	—
—	—	—	—	129	56	9	—	—	—	26	—	79	59	—	—	—
—	88	—	119	—	—	—	—	—	—	—	—	—	—	—	—	—
2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
0	2	0	228	63	167	40	146	266	265	174	136	628	432	2,568	173	179
—	—	31	122	32	38	—	17	75	214	21	11	13	—	162	—	—
169	268	29	104	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
210	451	407	824	287	:54	86	349	153	28	139	—	103	6	—	—	—
4	—	24	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	85	—	—
4	14	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—
—	47	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
16	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
9	—	30	8	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	6	—	—	—	—	—	—	—	—	—	—
6	26	75	1,143	—	5	21	115	106	7	58	1	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
767	962	98	2,716	294	34	29	121	181	292	20	47	290	161	1,155	—	—
—	—	—	—	2	1	6	60	—	—	—	—	—	—	—	—	—
—	—	—	21	—	—	—	3	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	26	72	6	—	—
—	—	—	—	7	8	1	—	—	—	13	2	24	7	17	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	134	—	—
50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
6	—	313	10	—	—	3	92	—	7	—	—	—	—	151	—	—
—	—	—	3	—	—	—	—	2	15	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
42	213	24	1,615	—	—	—	—	8	—	—	—	—	—	—	—	—

(r) Includes Sylvarin Oil, & White Flash Oil.

(s) Includes Q Oil Co. of Elizabeth City, Greenville, Hickory, Mt. Airy, Salisbury, Statewide, Southern Pines, Inc., & Gas House Company.

(t) Includes Corner Food Stores, Inc.

(u) Includes Masoil, Inc., Thrifty Petroleum, Camellia State Petroleum, & Maverick Oil, Inc.

(v) Includes Lil' Feller.

(w) Includes John G. Stumpf, Inc.

(x) Company markets in these states, but numbers are not available.

(y) Includes Autotronic Systems, Inc.

(z) Includes Omega Oil Co. (62).

(aa) Includes Boron Oil Company & BP Oil Inc.

(bb) Includes Etna Service Stations.

(cc) Includes Direct Oil Corp., Q-S Petroleum, Inc., Red Diamond Oil Company, & TLC Oil Company.

(dd) Includes Town Pump, & Gas-A-Matic.

(ee) Includes Beacon Oil Co.

(ff) Includes Sello, Reelo; Hi-Val, Big-Bi; & Lo-Lo.

(A) Estimated.

(B) Numbers not available.

Source: NPN questionnaires

†Includes District of Columbia

Branded Retail Outlets (cont'd.)

Company	TOTAL BRANDED RETAIL OUTLETS	TOTAL NUMBER OF STATES WHERE GASOLINE BRAND IS MARKETED†	West North Central						
			Minn.	Iowa	Mo.	N.D.	S.D.	Neb.	Kan.
Harrell Petroleum Co.	27	1	—	—	—	—	—	—	—
Harris Enterprises, Inc.	41	2	—	—	—	—	—	—	—
Heathwood Oil Co.	1,000	2	—	500	—	—	—	500	—
Highway Oil, Inc. (xxx)	223	26	—	1	12	1	4	1	21
Hi-Quality Lo-Cost Service Stn., Inc.	18	1	—	—	—	—	—	—	18
Barney Holland Oil Co.	60	1	—	—	—	—	—	—	—
Hornet Oil Co. (xxx)	35	6	—	—	—	—	—	—	3
Hudson Oil Co. (xxx)	305	29	7	14	15	—	—	5	14
Husky Oil Co.	562	17	—	2	—	3	5	46	2
JS & J Service, Inc.	20	2	—	—	—	—	—	—	—
Kent Oil Co.	22	1	—	—	—	—	—	—	—
Kerr-McKee Refining Corp. (xxx)	1,431	17	65	98	84	8	29	53	128
Krause General Oil Corp. (k)	52	1	—	52	—	—	—	—	—
The Kunz Oil Co. (xxx)	33	1	33	—	—	—	—	—	—
Kwik Shop, Inc.	101	3	—	25	—	—	—	27	49
Lerner Oil Co., Inc. (xxx)	106	1	—	—	—	—	—	—	—
Malco Products, Inc.	73	3	—	—	—	—	—	—	—
Martin Oil Service, Inc. (l)	146	13	3	4	—	—	—	1	—
Merritt Truax, Inc.	56	1	—	—	—	—	—	—	—
Mico Oil Co., Inc.	28	14	3	—	2	1	2	—	2
Midland Cooperatives, Inc.	276	5	125	19	—	7	—	—	—
Mid-Missouri Oil Co.	14	1	—	—	14	—	—	—	—
Midwest Petroleum Co. (xxx)	66	1	—	—	66	—	—	—	—
Milder Oil Co.	15	1	—	—	—	—	—	15	—
Miller & Holmes, Inc. (xxx)	29	10	9	1	—	8	2	2	—
Mobil Oil Corp. (ff)	16,564	45	516	234	479	138	195	222	189
Munford, Inc.	463	13	—	—	1	—	—	—	—
Murphy Oil Corp.	767	14	59	—	—	—	—	—	—
Musket Corp. (xxx)	82	5	—	—	—	—	—	—	18
National Convenience Stores, Inc. (n)	131	39	(x)	(x)	(x)	(x)	(x)	(x)	(x)
Neal, Inc.	44	1	—	—	—	—	—	—	—
Newell Oil Co.	13	1	—	—	—	—	—	—	—
Oasis Petroleum Corp. (xxx)	104	20	3	—	—	1	—	—	—
Pacer Oil Co.	12	2	—	—	—	—	—	—	—
Curtis Parker Oil Co.	41	1	—	—	—	—	—	—	—
Penna. Petroleum Products Co. (xxx)	1,558	20	26	—	—	—	—	—	—
Pester Corp. (p)	221	10	13	99	23	—	6	15	20
Petroleum Oil Co. (xxx)	54	2	—	—	—	—	—	—	—
Phillips Petroleum Co. (q)	12,327	38	514	525	896	40	120	288	367
Piasa Motor Fuels, Inc.	22	2	—	—	2	—	—	—	—
Powerine Oil Co.	39	2	—	—	—	—	—	—	—
Pride of Texas Distributing Co., Inc.	29	1	—	—	—	—	—	—	—
Quortrap Petroleum Co.	12	1	—	—	—	—	—	—	—
Racetrac Petroleum, Inc.	125	12	—	—	1	—	—	—	—
Remote Services, Inc. (xxx)	301	13	—	1	—	—	—	—	3
Research Fuels, Inc. (xxx)	74	8	—	—	—	—	—	—	—
River City Petroleum, Inc.	18	1	—	—	—	—	—	—	—
Sahara Oil Co., Inc.	22	1	—	—	—	—	—	—	—
Sav-Mor Oil Co. (xxx)	100	14	—	—	1	—	—	—	—
Schaeffer Oil (v)	29	5	1	—	—	5	13	3	—
Self Service Oil Co.	19	4	—	2	5	—	—	—	—
Shay Oil Co., Inc. (xxx)	14	1	—	—	—	—	—	—	—
Shell Oil Co.	13,665	36	1	8	127	—	—	—	—
Sigmor Corp. (y)	577	20	—	—	1	—	—	—	—
South Central Oil Co.									
Southern Counties Oil Co.	5	1	—	—	—	—	—	—	—
Southern Union Refining Co. (xxx)	21	1	—	—	—	—	—	—	—
J.D. Streett & Co., Inc.	356	5	—	15	168	—	—	—	—
Star Service & Petroleum Co.	186	17	—	(x)	(x)	—	—	(x)	(x)
Suburban Propane Gas Corp.	95	4	—	—	—	—	—	—	—
Sun Co.	8,361	33	1	378	255	—	—	7	10
Sunmark Industries (xxx)	9,433	37	56	441	284	1	25	48	68
Sunny Service Stations, Inc.	15	1	—	—	—	—	—	—	—
Sunshine JR Stores, Inc.	307	5	—	—	—	—	—	—	—
Tenneco Oil Co. (cc)	484	17	—	—	—	—	—	—	—
Texaco Inc.	22,490	50	14	22	161	13	45	63	33
Texas Star Oil Corp.	75	1	—	—	—	—	—	—	—
Thornton Oil Corp.	100	18	—	—	—	—	—	—	—
Thriftyman Enterprises									
Thunderbird Petroleums, Inc. (xxx)	250	4	—	—	—	50	—	—	—
Time Oil Co.	211	5	—	—	—	—	—	—	—
Tommy Oil Co., Inc.	36	12	—	—	3	—	—	—	2
Total Petroleum, Inc.	1,893	22	56	127	372	7	20	76	321
Truax Corp. (dd)	92	2	—	—	—	—	—	—	—
Union Oil Co. of Calif.	12,529	44	258	65	17	9	9	3	1
U-Pump-It of Kansas	19	2	—	—	—	—	—	—	16
Warelub Co., Inc.	84	6	—	14	3	—	—	—	—
Webster Oil Co.	35	1	—	—	35	—	—	—	—
Western Marketing, Inc.	19	2	—	—	—	—	—	—	1
Wickland Oil Co.	86	3	—	—	—	—	—	—	—

(xxx) 1980 data: Companies failed to respond to 1981 questionnaire.

(a) Includes American Petrofina Marketing, Inc., Dujax Fina Oil Co., Porto Fina Oil Co., & Tambay Fina Oil Co.

(b) Includes Gasamat Oil Corp. of Colorado.

(c) Includes Prestige Stations, Inc. Data as of 12/21/81.

(d) Includes Fulcher & Martin.

(e) Includes Gas-Up, Inc.

(f) Includes Colonial Interstate, Inc. & Interstate Stations, Inc.

(g) Includes Convenient Gasoline & Petro Oil Co.

(h) Includes Eagle Oil Co., Morral Oil Co., & River Oil Co.

(i) Includes Flying J, Vista, & Westland.

(j) Includes Jr. Food Mart of Texas, Inc.

(k) Includes North Iowa Oil & Tri-Iowa Oil.

(l) Subsidiary or affiliated. Includes Martin-4-Min. Auto Salon, Inc. & Martin Oil of Indiana, Inc.

(m) Includes Peninsular Petroleum Co.

(n) Includes Stop-N-Go, Hot Stop, Shop-N-Go, & PDO.

(o) Includes Barach-Fords Oils, & City Oil Co.

(p) Includes Pester Marketing Northern, & Pester Marketing Southern.

(q) Includes Aero Oil Co.

West South Central				Mountain								Pacific				
Ark.	La.	Okla.	Texas	Mont.	Idaho	Wyo.	Colo.	N.M.	Ariz.	Utah	Nev.	Wash.	Ore.	Calif.	Alaska	Hawaii
—	—	—	27	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	3	38	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	1	—	12	—	—	4	3	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	60	—	—	—	—	—	—	—	—	—	—	—	—	—
7	2	16	7	—	—	—	—	—	—	—	—	—	—	—	—	—
—	5	—	—	—	2	—	8	—	10	—	6	18	20	60	—	—
—	—	—	1	92	37	55	92	19	5	142	18	32	7	2	—	—
—	—	—	—	—	—	—	—	—	1	—	—	—	—	19	—	—
—	—	—	22	—	—	—	—	—	—	—	—	—	—	—	—	—
206	—	307	106	—	—	—	—	46	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	106	—	—
—	—	—	14	—	—	—	—	46	13	—	—	—	—	—	—	—
—	—	—	1	—	—	3	—	—	—	—	—	—	—	2	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	56	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	3	—	—	—	—	—	—	—	—	—	—	—	—
94	264	118	1,308	—	—	—	—	27	142	1	22	404	287	653	—	—
18	57	—	50	—	—	—	—	—	—	—	—	—	—	—	—	—
13	45	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	55	1	—	—	—	7	1	—	—	—	—	—	—	—	—
(x)	—	—	—	(x)	(x)	(x)	(x)	(x)	—	(x)	—	(x)	(x)	—	(x)	(x)
—	—	—	44	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	13	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	1	—	—	—	—	—	—	15	—	—
1	—	11	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	41	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	3	40	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	—	—	—
301	226	591	1,583	88	92	63	308	201	40	128	22	2	—	1	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	25	—	9
—	—	—	29	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	12	—	—	—	—	—	—	—	—	—	—	—	—	—
4	8	—	3	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	6	—	52	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	18	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	22	—	—	—	—	—	—	—
—	—	—	8	4	10	—	—	1	6	—	2	3	1	60	—	—
—	—	—	—	—	—	7	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	14	—	—	—	—	—	—	—
—	115	—	222	—	—	—	—	7	54	—	27	127	112	1,613	—	78
—	26	1	418	—	4	—	11	—	—	1	2	12	—	39	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	5	—	—	—
—	—	—	—	—	—	—	—	22	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(x)	(x)	(x)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	18	43	30	4	—	—	—	—	—	—
25	—	273	—	—	—	—	—	—	—	—	—	16	—	—	—	—
209	—	438	—	—	—	—	—	—	—	—	—	10	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	15	—	—	—
—	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	46	—	39	—	—	—	14	—	—	—	—	—	—	—	—	—
517	938	506	3,394	1	72	102	294	292	205	129	73	458	348	1,749	76	51
—	—	—	75	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	7	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	150	2	—	—	—	—	—	50	—	—	—	—	—
—	—	—	—	—	2	—	—	—	—	—	10	137	15	47	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
21	6	179	25	—	—	—	49	11	23	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	3	89	—	—	—
105	21	2	91	4	61	—	1	2	161	10	65	383	308	2,074	103	141
—	—	—	—	—	—	—	3	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	18	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	5	—	1	80	—	—

(r) Includes Sylvarin Oil, & White Flash Oil.

(s) Includes Q Oil Co. of Elizabeth City, Greenville, Hickory, Mt. Airy, Salisbury, Statewide, Southern Pines, Inc., & Gas House Company.

(t) Includes Corner Food Stores, Inc.

(u) Includes Masoil, Inc., Thrifty Petroleum, Camellia State Petroleum, & Maverick Oil, Inc.

(v) Includes Lil' Feller.

(w) Includes John G. Stumpf, Inc.

(x) Company markets in these states, but numbers are not available.

(y) Includes Autotronic Systems, Inc.

(z) Includes Omega Oil Co. (82).

(aa) Includes Boron Oil Company & BP Oil Inc.

(bb) Includes Etna Service Stations.

(cc) Includes Direct Oil Corp., Q-S Petroleum, Inc., Red Diamond Oil Company, & TLC Oil Company.

(dd) Includes Town Pump, & Gas-A-Matic.

(ee) Includes Beacon Oil Co.

(ff) Includes Sello, Reelo, Hi-Val, Big-Bi, & Lo-Lo.

(A) Estimated.

(B) Numbers not available.

Source: NPN questionnaires

†Includes District of Columbia

Average Number of Employees in Oil

(As of Jan. 1, 1981)

	Mining	Manufacturing		Transportation		Wholesale	Retail	
	Crude Oil and Natural Gas Extraction	Petroleum Refining	Lubricating Oils and Greases	Pipelines (Except Natural Gas)	Gas Production and Distribution	Petroleum and Petroleum Products	Gasoline Service Stations	Total
Alabama	1,716	380	N.D.	94	2,943	4,111	7,555	16,799
Alaska	5,870	N.D.	0	N.D.	230	350	925	7,375
Arizona	157	110	0	N.D.	959	1,414	7,145	9,785
Arkansas	3,247	746	N.D.	325	2,326	2,556	4,832	14,032
California	32,745	24,587	859	849	9,797	16,220	58,778	143,835
Colorado	18,064	538	29	154	2,206	3,133	9,083	33,207
Connecticut	240	0	90	20	1,310	2,420	8,580	12,660
Delaware	53	923	9	0	404	413	1,508	3,310
Florida	735	188	83	60	2,115	6,948	25,755	35,884
Georgia	76	107	118	482	3,557	6,303	14,176	24,819
Hawaii	0	450	0	0	357	454	3,391	4,652
Idaho	170	0	0	15	495	1,461	2,063	4,204
Illinois	6,500	11,000	800	1,100	9,000	10,800	30,000	69,200
Indiana	743	3,392	383	446	2,830	4,316	15,088	27,198
Iowa	13	0	N.D.	188	1,188	3,984	11,038	16,411
Kansas	13,716	4,022	444	2,043	4,869	2,847	7,121	35,062
Kentucky	2,905	3,494	3	171	2,803	3,013	9,660	22,049
Louisiana	85,779	12,288	447	1,143	6,401	6,236	9,173	121,467
Maine	N.D.	0	0	N.D.	N.D.	1,219	2,461	3,680
Maryland	66	0	232	0	1,439	3,450	12,754	17,941
Massachusetts	15	280	320	N.D.	4,790	3,770	14,060	23,235
Michigan	3,876	2,109	497	250	8,334	6,535	20,879	42,480
Minnesota	N.D.	979	N.D.	216	2,658	2,845	15,636	22,334
Mississippi	9,680	1,260	80	180	2,180	2,980	4,890	21,250
Missouri	150	N.D.	300	280	4,710	7,380	14,260	27,080
Montana	4,636	1,036	0	100	103	1,666	2,691	10,232
Nebraska	723	64	179	111	3,446	1,718	6,676	12,917
Nevada	811	N.D.	N.D.	22	N.D.	492	3,625	4,950
New Hampshire	17	0	0	3	312	656	2,436	3,424
New Jersey	98	8,995	1,027	140	1,913	4,687	18,026	34,886
New Mexico	13,441	1,023	8	231	3,555	1,705	4,408	24,371
New York	2,202	10,352	384	119	7,067	13,879	29,165	63,168
North Carolina	26	14	181	116	2,298	7,327	10,297	20,259
North Dakota	6,314	271	0	146	12	2,151	2,388	11,282
Ohio	9,823	9,547	670	713	7,989	6,380	26,918	62,040
Oklahoma	68,300	8,000	400	2,700	5,000	7,200	5,900	97,500
Oregon	136	0	10	0	1,503	2,302	8,187	12,138
Pennsylvania	4,117	13,054	1,509	722	8,819	10,994	27,651	66,866
Rhode Island	54	0	0	0	842	723	2,106	3,725
South Carolina	0	0	0	0	510	3,621	6,748	10,879
South Dakota	106	17	0	64	136	1,506	2,831	4,662
Tennessee	2,771	1,063	100	184	6,635	17,800	48,733	77,286
Texas	231,170	37,234	442	5,636	27,257	25,505	34,643	361,887
Utah	4,520	879	3	105	2,566	1,807	4,350	14,230
Vermont	0	0	14	0	141	418	1,490	2,063
Virginia	200	200	0	100	2,300	6,500	14,200	23,500
Washington	103	1,625	N.D.	89	1,571	2,993	9,397	15,778
West Virginia	4,500	N.D.	N.D.	N.D.	5,500	2,100	4,200	16,300
Wisconsin	17	150	112	157	2,865	4,547	14,324	22,172
Wyoming	18,077	1,712	2	412	870	1,003	2,980	25,056
Dist. of Columbia	0	0	0	0	41	210	1,034	1,285
Total	**558,680**	**162,089**	**9,735**	**19,886**	**171,152**	**217,248**	**506,196,000**	**1,762,825**

N.D. = Non-Disclosure

Source: Independent Petroleum Assn. of America, "Oil Industry in Your State, 1981."

Fuel Oil Demand by Type of Use

Consumption of distillates totalled 1,048-million bbl. in 1980, down a sharp 13.2% from revised figures for 1979. Resid consumption fell off too, dropping to 918-million bbl., a decrease of 11% from 1979's revised figures. (Note caveat at right).

How Distillates Were Used in 1980

(Add 000 bbl.)

Use	1980	1979	% Change	% Share of total distillate use in 1980	% Share of total distillate use in 1979
Heating	(a)	(a)	—	—	—
Residential	224,902	274,639	(18.1)%	21.4%	—
Commercial...	88,471	98,557	(10.2)	8.4	—
Industrial	79,092	97,325	(18.7)	7.5	—
Farm.........	65,595	83,715	(21.6)	6.3	—
Oil Company..	18,071	20,065	(9.9)	1.7	—
Elec. Utils.....	31,812	46,579	(31.7)	3.0	—
Railroads.....	105,841	106,652	(0.8)	10.1	—
Vessels	28,166	38,826	(27.5)	1.9	—
Military.......	20,152	17,810	13.1	1.9	—
Highway diesel	323,431	327,402	(1.2)	30.8	—
Off-highway diesel	45,025	63,102	(28.6)	4.3	—
All other......	18,417	33,784	(45.5)	1.2	—
Total.......	1,048,975	1,208,456	(13.2)%	—	—

(a) Separate heating category no longer available. The sum of residential, commercial, industrial and farm categories roughly equals the heating totals of prior years.
Source: Department of Energy, Fuel Oil Sales Annual, 1980.

How Resid Was Used in 1980

(Add 000 bbl.)

Use	1980	1979	% Change	% Share of total residual use in 1980	% Share of total residual use in 1979
Heating	(a)	(a)	—	—	—
Commercial...	90,005	81,216	10.8 %	9.8%	7.9%
Industrial	154,568	197,914	(21.9)	16.8	19.2
Oil Company..	56,409	51,308	9.9	6.1	5.0
Elec. Utils.....	390,105	486,636	(19.8)	42.3	47.2
Railroads.....	631	251	151.4	—	—
Vessels	213,131	190,543	11.9	23.2	18.5
Military.......	9,124	6,718	35.8	1.0	0.6
All other......	4,053	16,971	(76.1)	0.5	1.6
Total.......	918,026	1,031,557	(11.0)%	—	—

(a) Separate heating category no longer available. The sum of the commercial and industrial categories roughly equals the heating totals of prior years.
Source: Department of Energy, Fuel Oil Sales Annual, 1980.

How New Homes Are Heated

Fuel oil's position in the new home market slipped badly in 1980, the most recent year for which data are available. Gas-heated homes increased significantly, mostly at the expense of oil-heated homes in the Northeast. Nationwide, oil dropped to 3% of the total.

Region	New Homes Completed (Add 000)	Share of New Homes by Fuels and Percentages			
		Gas	Electric	Oil	Other
Northeast	100	35%	36%	17%	11%
North Central.....	170	60	27	4	10
South...........	465	30	67	1	2
West	233	52	42	—	6
Total 1980.....	957	41%	50%	3%	5%
Total 1979.....	1,301	39%	51%	7%	3%

CAVEAT CAVEAT CAVEAT

Department of Energy revised its questionnaires, format, and sampling techniques in handling the 1979 and 1980 Fuel Oil Sales Reports. Thus data on this and other fuel-oil pages are not comparable with those in the past. For example, DOE dropped the traditional "heating" categories and split the information between "commercial" and "residential" columns. It also added a new column, "farm," in the 1979 report, thus further splintering some of the old data bases. Future issues of the Factbook will parallel the new DOE format but extra precaution should be taken in trying to balance and/or compare the data from 1979 and 1980 against that of the earlier years.

Gas: Who Uses It for Heat

Gas added more than 1-million space-heating customers in 1980, up 14% over the preceding year. Almost 60% of the additions were conversions from other fuels, notably No. 2 heating oil. Gas installations in new homes dipped again in 1980 for the second year in a row.

	% of Gas-heated homes to total gas-using homes	Consumers Added in 1980 (Add 000)		
		New homes	Existing homes	Total added
New England............	63.1%	9.4	63.5	72.9
Mid-Atlantic	60.0	26.0	212.2	238.2
East North Central.......	92.1	76.3	164.9	241.2
West North Central	96.2	34.9	28.4	63.3
South Atlantic	89.4	56.7	82.9	139.6
East South Central.......	98.5	18.1	4.4	22.5
West South Central......	99.5	71.4	4.2	75.6
Mountain	98.2	68.7	2.6	71.3
Pacific..................	95.8	145.7	19.9	165.6
Total.................	87.8%	507.2	583.0	1,090.2
% Change '80 vs '79.....	—	−14.3%	59.6%	13.9%

Source: American Gas Assn., Home Heating Survey, 1980.

Gas Heat Equipment Shipments

Shipments of central heating furnaces and boilers for gas-fired installations dropped again in 1981, according to Gas Appliance Manufacturers Assn. Furnaces sagged 1.8% while boilers plummeted another 44.8%. Shipments of floor furnaces declined for the third year in a row while vented wall and direct furnaces rose for the first time in several years.

Class and Type of Equipment	1981	1980	% Change
Central Heating:			
Furnaces.................	1,420,400	1,445,700	−1.8%
Boilers..................	161,900	293,300	−44.8
Space Heating:			
Wall Furnaces Vented	127,160	124,930	1.8
Direct Furnaces..........	80,140	74,460	7.6
Floor Furnaces	10,552	12,240	−13.8

Source: Gas Appliance Manufacturers Assn.

Distillate Sales in 1980 . . .

(Add 000 bbl.)

Destination	Residential		Commercial		Industrial		Oil Company	
	1980(a)	1979(b)	1980(a)	1979(b)	1980(a)	1979(b)	1980(a)	1979(b)
PAD District 1								
New England States								
Connecticut	13,406	17,606	2,892	5,720	2,554	1,603	82	69
Maine	6,343	7,166	1,832	1,510	374	281	22	5
Massachusetts	22,607	25,848	7,475	9,015	1,351	1,443	51	28
New Hampshire	3,503	4,244	1,039	441	369	200	13	9
Rhode Island	3,282	4,876	614	1,223	281	291	9	11
Vermont	2,161	3,170	617	648	160	172	12	10
Central Atlantic States								
Delaware	1,310	1,453	631	560	281	323	4	1
District of Columbia	746	831	644	670	37	27	2	9
Maryland	8,756	9,184	2,852	3,576	1,706	2,095	189	122
New Jersey	23,866	21,139	9,125	7,138	5,645	4,872	175	122
New York	37,516	43,738	14,425	14,822	6,360	9,713	316	182
Pennsylvania	27,710	31,868	5,831	5,540	6,106	6,707	716	1,707
Lower Atlantic States								
Florida	1,209	1,052	1,917	2,135	2,107	1,486	373	172
Georgia	575	299	314	853	1,626	1,773	79	62
North Carolina	7,012	9,282	1,665	1,823	1,952	2,467	77	97
South Carolina	1,573	1,947	479	579	663	880	53	74
Virginia	7,346	12,847	1,626	2,735	1,933	2,464	106	65
West Virginia	1,164	1,280	261	469	1,761	2,347	269	179
PAD 1 Total	**170,085**	**197,832**	**54,239**	**59,457**	**35,268**	**39,144**	**2,568**	**2,924**
PAD District 2								
Illinois	3,496	8,226	2,090	2,594	2,010	2,327	581	671
Indiana	5,373	7,613	1,976	2,647	1,913	2,739	199	162
Iowa	2,377	3,274	748	1,312	733	1,336	38	34
Kansas	149	373	358	607	263	416	518	537
Kentucky	816	817	2,620	1,693	2,166	2,708	319	123
Michigan	9,153	11,341	3,109	2,096	1,407	1,436	119	132
Minnesota	5,919	7,049	1,436	1,723	1,264	2,453	73	61
Missouri	1,240	1,742	996	1,441	586	1,820	91	92
Nebraska	358	448	180	450	120	431	33	15
North Dakota	1,168	1,570	639	356	211	259	208	116
Ohio	7,396	7,621	2,579	1,513	6,005	4,366	374	286
Oklahoma	15	6	314	206	292	291	887	391
South Dakota	758	931	363	370	78	84	19	20
Tennessee	307	369	1,010	919	2,045	3,275	230	339
Wisconsin	8,117	12,066	1,674	1,956	953	1,747	35	53
PAD 2 Total	**46,642**	**63,446**	**20,092**	**20,083**	**20,046**	**25,688**	**3,724**	**3,032**
PAD District 3								
Alabama	13	88	638	649	1,389	2,899	133	21
Arkansas	151	409	111	233	283	589	135	533
Louisiana	5	41	397	5,741	2,498	3,902	2,089	3,547
Mississippi	7	144	24	175	621	769	255	268
New Mexico	11	5	132	187	605	777	113	60
Texas	8	712	2,829	4,395	4,395	8,795	5,338	4,708
PAD 3 Total	**195**	**1,399**	**4,131**	**11,380**	**9,791**	**17,731**	**8,983**	**9,137**
PAD District 4								
Colorado	78	328	337	273	1,143	692	81	67
Idaho	483	881	217	309	575	1,090	25	17
Montana	419	664	344	754	273	451	175	257
Utah	111	230	1,023	837	814	1,106	124	103
Wyoming	23	38	426	92	2,306	1,961	1,324	693
PAD 4 Total	**1,114**	**2,141**	**2,347**	**2,265**	**5,111**	**5,320**	**1,729**	**1,137**
PAD District 5								
Alaska	1,167	827	574	287	682	609	2	3
Arizona	2	200	279	448	1,600	1,434	17	36
California	94	1,060	3,210	1,392	3,581	4,213	433	2,365
Hawaii	1	2	396	259	106	170	196	581
Nevada	186	208	351	102	294	218	2	2
Oregon	2,010	2,659	1,784	1,378	1,215	1,563	192	283
Washington	3,406	4,765	1,068	1,506	1,398	1,235	245	565
PAD 5 Total	**6,866**	**9,821**	**7,662**	**5,372**	**8,876**	**9,442**	**1,087**	**3,835**
U.S. Total	**224,902**	**274,639**	**88,471**	**98,557**	**79,092**	**97,325**	**18,071**	**20,065**

(a) Preliminary: (b) Final

. . . By Categories and Uses

Destination	Electric Utility 1980(a)	Electric Utility 1979(b)	Farm 1980(a)	Farm 1979(b)	Military 1980(a)	Military 1979(b)	Railroad 1980(a)	Railroad 1979(b)	Vessel Bunkering 1980(a)	Vessel Bunkering 1979(b)
PAD District 1										
New England States										
Connecticut	108	92	84	101	1	2	93	176	28	59
Maine	64	72	112	131	22	34	185	236	30	142
Massachusetts	412	335	130	120	99	306	278	276	154	186
New Hampshire	15	20	62	87	11	17	7	5	10	3
Rhode Island	30	0	18	19	1	3	0	0	33	66
Vermont	17	38	114	86	1	16	47	137	7	6
Central Atlantic States										
Delaware	193	279	113	122	42	16	40	29	52	59
District of Columbia	1,288	1,748	0	38	84	272	93	154	1	2
Maryland	1,671	1,154	515	416	481	781	833	1,012	616	853
New Jersey	1,956	1,941	204	174	67	68	277	1,840	1,786	1,963
New York	760	1,077	1,190	1,293	39	221	1,389	2,024	1,020	1,493
Pennsylvania	2,279	2,971	1,307	1,241	163	238	4,352	4,784	370	821
Lower Atlantic States										
Florida	2,533	4,134	1,072	963	59	1,343	1,944	1,262	2,233	2,896
Georgia	774	675	1,078	828	229	510	2,870	1,314	417	594
North Carolina	496	438	1,423	1,434	65	68	1,482	2,852	124	719
South Carolina	667	553	743	673	127	221	463	736	166	310
Virginia	887	1,543	502	444	259	1,172	2,685	3,404	757	1,058
West Virginia	702	786	90	25	20	34	1,759	2,023	141	267
PAD 1 Total	**14,852**	**17,856**	**8,757**	**8,195**	**1,770**	**5,322**	**18,797**	**22,264**	**7,945**	**11,497**
PAD District 2										
Illinois	970	3,800	3,131	3,585	627	114	7,273	8,706	248	248
Indiana	835	1,388	2,090	3,912	11	18	3,908	4,249	78	71
Iowa	39	1,098	3,344	4,529	32	38	1,519	1,659	25	20
Kansas	43	607	2,141	3,704	14	95	4,885	4,871	1	0
Kentucky	237	204	390	483	45	153	3,691	2,798	3,110	4,204
Michigan	1,049	1,377	2,319	2,415	432	172	2,062	2,156	62	99
Minnesota	608	584	3,531	3,960	43	38	1,845	2,154	256	299
Missouri	471	1,060	3,080	3,963	25	37	1,737	1,866	582	488
Nebraska	169	404	2,961	4,787	22	38	1,629	2,591	11	8
North Dakota	84	388	1,787	2,104	627	554	1,302	829	0	0
Ohio	1,858	2,958	2,193	1,657	130	5	7,598	2,221	133	364
Oklahoma	18	124	1,067	967	87	1	760	622	2	25
South Dakota	103	141	1,394	2,103	43	76	217	311	0	0
Tennessee	397	763	758	851	33	651	3,039	3,110	983	2,588
Wisconsin	552	1,454	1,920	4,959	12	18	1,194	1,451	172	176
PAD 2 Total	**7,453**	**16,350**	**32,106**	**43,979**	**2,183**	**2,008**	**42,659**	**39,594**	**5,663**	**8,590**
PAD District 3										
Alabama	128	137	790	532	102	1,042	2,955	550	371	895
Arkansas	335	408	1,609	2,925	40	24	1,630	1,651	56	530
Louisiana	2,116	1,620	1,390	1,356	82	51	2,139	2,752	3,423	4,410
Mississippi	299	254	1,429	1,166	40	101	917	689	211	557
New Mexico	276	636	173	330	20	3	1,427	1,788	0	0
Texas	2,050	568	5,401	8,918	6,390	1,119	7,744	11,007	5,760	6,824
PAD 3 Total	**5,204**	**3,623**	**10,792**	**15,227**	**6,674**	**2,340**	**16,812**	**18,437**	**9,821**	**13,216**
PAD District 4										
Colorado	164	838	1,442	1,495	111	159	3,055	3,733	0	0
Idaho	0	5	1,035	1,420	194	211	1,250	1,293	0	0
Montana	94	163	877	1,208	27	26	2,395	2,153	0	0
Utah	77	118	201	256	13	131	2,329	2,584	0	0
Wyoming	145	156	357	926	16	2	4,167	3,446	0	0
PAD 4 Total	**480**	**1,280**	**3,912**	**5,305**	**361**	**529**	**13,196**	**13,209**	**0**	**0**
PAD District 5										
Alaska	502	967	17	19	338	274	79	87	1,097	1,075
Arizona	1,003	1,805	981	971	15	33	1,298	1,314	0	0
California	897	2,667	6,716	7,394	4,970	3,628	7,288	6,399	2,267	2,147
Hawaii	886	278	373	319	2,840	3,385	22	2	26	38
Nevada	83	35	108	108	10	2	898	438	0	0
Oregon	366	1,630	777	761	57	96	2,895	2,980	144	421
Washington	86	88	1,056	1,437	934	193	1,897	1,928	1,203	1,842
PAD 5 Total	**3,823**	**7,470**	**10,028**	**11,009**	**9,164**	**7,611**	**14,377**	**13,148**	**4,737**	**5,523**
U.S. Total	**31,812**	**46,579**	**65,595**	**83,715**	**20,152**	**17,810**	**105,841**	**106,652**	**28,166**	**38,826**

(a)Preliminary: (b)Final. (table continued on next page).

Distillate Sales in 1980 (Continued)

(Add 000 bbl.)

	On-Highway		Off-Highway		Other		Total	
Destination	**1980(a)**	**1979(b)**	**1980(a)**	**1979(b)**	**1980(a)**	**1979(b)**	**1980(a)**	**1979(b)**
PAD District 1								
New England States								
Connecticut	2,446	2,426	422	206	78	76	22,194	28,138
Maine	1,349	1,384	183	203	67	123	10,583	11,287
Massachusetts	4,346	4,291	250	470	95	336	37,248	12,654
New Hampshire	656	645	99	87	12	20	5,796	5,778
Rhode Island	638	544	37	43	68	23	5,011	7,099
Vermont	699	736	191	338	22	51	4,048	5,408
Central Atlantic States								
Delaware	825	654	167	79	48	149	3,706	3,724
District of Columbia	406	428	13	28	139	178	3,453	4,385
Maryland	3,891	3,524	658	735	214	510	22,382	23,962
New Jersey	8,066	7,062	665	802	616	3,407	52,448	50,528
New York	7,814	8,074	1,054	1,249	376	4,988	72,259	88,874
Pennsylvania	16,555	15,311	2,564	3,939	382	1,399	68,337	76,526
Lower Atlantic States								
Florida	11,704	10,085	1,082	586	2,410	1,764	28,643	27,877
Georgia	10,554	10,611	386	218	806	774	19,708	18,511
North Carolina	8,987	9,240	494	552	166	265	23,943	29,237
South Carolina	5,372	5,485	265	282	142	124	10,713	11,864
Virginia	7,466	6,404	843	939	173	276	24,583	33,351
West Virginia	2,904	1,836	1,069	1,138	359	336	10,519	10,721
PAD 1 Total	**94,678**	**88,740**	**10,442**	**11,894**	**6,173**	**14,799**	**425,574**	**479,924**
PAD District 2								
Illinois	14,308	16,828	1,281	1,699	803	551	36,818	49,349
Indiana	13,551	12,953	617	457	211	197	30,762	36,406
Iowa	6,312	6,957	312	565	249	165	15,728	20,987
Kansas	5,449	5,511	502	1,892	36	468	14,359	19,281
Kentucky	5,890	5,553	3,320	2,015	208	390	22,812	21,141
Michigan	7,140	8,816	652	1,294	285	308	27,789	31,642
Minnesota	5,936	7,212	727	813	87	371	21,725	26,717
Missouri	8,430	8,916	923	1,149	80	629	18,241	23,203
Nebraska	3,426	3,434	272	217	9	34	9,210	12,857
North Dakota	1,849	1,939	153	229	90	90	8,118	8,434
Ohio	16,604	16,935	2,593	6,522	1,368	1,478	48,831	45,926
Oklahoma	7,144	7,369	1,133	4,126	309	262	12,028	14,390
South Dakota	1,708	1,882	129	384	12	30	4,824	6,332
Tennessee	9,080	9,631	601	1,243	598	146	19,081	23,885
Wisconsin	7,153	7,618	569	610	95	201	22,446	32,309
PAD 2 Total	**113,980**	**121,554**	**13,784**	**23,215**	**4,440**	**5,320**	**312,772**	**372,859**
PAD District 3								
Alabama	7,570	6,731	676	731	353	568	15,118	14,843
Arkansas	4,942	5,096	1,411	1,894	90	355	10,793	14,647
Louisiana	6,756	6,819	1,163	1,768	464	574	23,422	32,581
Mississippi	4,824	4,443	789	1,898	417	598	9,833	11,062
New Mexico	3,939	3,757	1,149	2,203	146	148	7,991	9,894
Texas	28,170	29,622	4,394	6,947	629	4,222	73,108	87,837
PAD 3 Total	**56,201**	**56,468**	**9,582**	**15,441**	**2,099**	**6,465**	**140,265**	**170,864**
PAD District 4								
Colorado	3,358	3,603	962	730	337	326	11,068	12,244
Idaho	1,293	1,932	474	363	90	116	5,636	7,637
Montana	2,315	2,535	441	517	150	309	7,510	9,037
Utah	2,609	2,623	707	1,045	364	526	8,372	9,559
Wyoming	2,206	2,202	1,921	2,153	318	313	13,209	12,002
FAD 4 Total	**11,781**	**12,895**	**4,505**	**4,808**	**1,259**	**1,590**	**45,795**	**50,479**
PAD District 5								
Alaska	1,079	284	187	435	888	809	6,612	5,776
Arizona	5,137	5,328	737	675	219	750	11,288	12,994
California	27,083	28,574	2,702	3,905	2,072	2,640	61,313	66,384
Hawaii	426	399	237	182	451	342	5,962	5,957
Nevada	1,833	1,590	194	324	50	52	4,009	3,079
Oregon	5,714	5,618	1,496	943	294	372	16,944	18,704
Washington	5,517	5,952	1,159	1,280	472	645	18,441	21,436
PAD 5 Total	**46,791**	**47,745**	**6,712**	**7,744**	**4,446**	**5,610**	**124,569**	**134,330**
U.S. Total	**323,431**	**327,402**	**45,025**	**63,102**	**18,417**	**33,784**	**1,048,975**	**1,208,456**

(a) Preliminary; (b) Final.

Caveat: This is a new format developed by Department of Energy in 1979. Thus this data is not comparable with pre-1980 issues of the NPN Factbook.

Source: Deliveries of Fuel Oil and Kerosine in 1980, Department of Energy, February, 1982.

Residual Fuel Oil Sales in 1980 . . .

(Add 000 bbl.)

	Commercial		Industrial		Oil Company		Electric Utility		Military	
Destination	**1980(a)**	**1979(b)**	**1980(a)**	**1979(b)**	**1980(a)**	**1979(b)**	**1980(a)**	**1979(b)**	**1980(a)**	**1979(b)**
PAD District 1										
New England States										
Connecticut	1,173	576	6,640	7,870	56	86	20,292	18,511	0	0
Maine	683	401	4,046	7,007	4	5	3,469	2,515	4	62
Massachusetts	4,864	3,819	2,310	6,566	105	38	44,519	46,660	11	602
New Hampshire	373	15	925	602	0	1	4,089	4,618	0	871
Rhode Island	180	271	629	856	1	2	1,337	1,096	0	39
Vermont	237	160	235	179	0	0	0	0	0	0
Central Atlantic States										
Delaware	4,274	1,696	1,705	2,098	0	0	5,995	6,732	0	0
District of Columbia	37	82	28	53	0	0	286	582	59	0
Maryland	1,161	1,107	2,352	4,372	222	23	7,722	13,809	123	15
New Jersey	10,972	10,588	10,763	14,666	6,243	7,397	12,400	18,336	52	0
New York	25,482	22,583	14,051	17,264	626	1,023	61,199	69,748	0	1,125
Pennsylvania	1,524	3,200	7,540	13,151	3,881	5,301	16,854	18,402	207	70
Lower Atlantic States										
Florida	1,479	2,595	13,430	12,092	35	72	70,135	72,213	199	262
Georgia	10	97	5,298	7,529	32	14	128	2,139	28	8
North Carolina	492	375	8,468	11,257	15	17	39	0	45	31
South Carolina	35	381	4,187	6,304	67	20	1,991	3,697	30	46
Virginia	444	208	4,986	6,280	134	120	14,605	22,888	138	301
West Virginia	5	9	1,091	1,603	370	369	0	0	0	0
PAD 1 Total	**53,425**	**48,163**	**88,684**	**119,749**	**11,791**	**14,488**	**265,060**	**301,946**	**896**	**3,432**
PAD District 2										
Illinois	2,638	4,190	7,594	6,960	4,886	3,800	12,853	11,391	271	283
Indiana	2,436	2,231	6,758	9,769	5,226	5,008	0	0	73	30
Iowa	79	239	274	572	0	0	14	0	0	0
Kansas	0	51	365	994	641	1,598	55	2,326	0	0
Kentucky	19	12	579	756	280	410	0	0	136	52
Michigan	225	487	2,726	3,095	456	198	8,335	14,798	24	30
Minnesota	32	117	1,569	874	226	276	268	921	47	60
Missouri	555	1,234	319	946	385	583	25	431	142	142
Nebraska	23	109	29	40	0	0	26	470	0	0
North Dakota	401	435	112	167	162	204	0	0	0	44
Ohio	381	1,353	3,979	4,570	1,499	1,167	79	1,503	0	0
Oklahoma	30	230	256	255	447	353	0	39	0	0
South Dakota	19	46	84	87	0	0	4	37	0	0
Tennessee	48	3	1,353	2,159	23	96	0	0	0	97
Wisconsin	30	213	1,269	1,214	141	136	76	68	14	8
PAD 2 Total	**6,916**	**10,950**	**27,266**	**32,458**	**14,372**	**13,829**	**21,735**	**31,984**	**707**	**746**
PAD District 3										
Alabama	3	1	3,720	4,819	54	1,951	0	0	586	0
Arkansas	438	953	1,441	2,869	0	64	2,789	7,375	0	0
Louisiana	13,493	8,867	7,512	8,402	4,597	6,703	5,139	13,377	3,091	36
Mississippi	3,412	5,753	1,899	3,364	261	250	4,124	11,311	0	27
New Mexico	0	0	649	202	206	17	79	313	0	0
Texas	2,574	1,069	8,663	13,514	6,778	3,658	853	2,149	937	136
PAD 3 Total	**19,920**	**16,643**	**23,884**	**33,170**	**11,896**	**12,643**	**12,984**	**34,525**	**4,614**	**199**
PAD District 4										
Colorado	3	13	174	330	1,442	122	141	655	0	0
Idaho	488	0	126	327	0	0	0	0	0	905
Montana	7	11	525	4,372	3,375	1,190	0	0	0	21
Utah	1,053	644	1,565	1,416	788	751	12	190	0	0
Wyoming	27	29	542	333	1,558	2,479	0	0	0	0
PAD 4 Total	**1,578**	**697**	**2,932**	**6,778**	**7,163**	**4,542**	**153**	**845**	**0**	**926**
PAD District 5										
Alaska	4	12	0	0	0	0	378	0	0	0
Arizona	0	79	137	50	0	44	890	4,830	0	0
California	6,825	4,076	3,975	2,074	8,590	4,656	75,914	100,119	477	558
Hawaii	25	16	313	319	929	379	10,271	10,407	49	25
Nevada	7	1	1	1	0	0	2,494	1,539	0	0
Oregon	878	418	2,338	1,203	177	106	0	0	4	0
Washington	427	161	5,038	2,112	1,491	621	226	441	2,377	832
PAD 5 Total	**8,166**	**4,763**	**11,802**	**5,759**	**11,187**	**5,806**	**90,173**	**117,336**	**2,907**	**1,415**
U.S. Total	**90,005**	**81,216**	**154,568**	**197,914**	**56,409**	**51,308**	**390,105**	**486,636**	**9,124**	**6,718**

(a) Preliminary; (b) Final. (Table continued on next page.)

Residual Fuel Oil Sales (Continued)

Destination	Railroad 1980(a)	Railroad 1979(b)	Vessel Bunkering 1980(a)	Vessel Bunkering 1979(b)	Other 1980(a)	Other 1979(b)	Total 1980(a)	Total 1979(b)
PAD District 1								
New England States								
Connecticut	0	0	53	50	0	150	28,214	27,243
Maine	4	2	201	697	5	54	8,416	10,743
Massachusetts	2	0	889	946	253	326	52,953	58,957
New Hampshire	0	0	49	0	0	1	5,436	6,108
Rhode Island	0	0	58	100	25	23	2,230	2,387
Vermont	0	0	0	0	0	0	472	339
Central Atlantic States								
Delaware	422	0	392	547	107	0	12,895	11,073
District of Columbia	0	0	0	50	26	0	436	767
Maryland	0	0	4,400	4,131	100	395	16,080	23,852
New Jersey	9	0	12,016	7,615	724	2,378	53,179	60,980
New York	0	0	11,367	11,198	168	7,399	112,893	130,340
Pennsylvania	8	10	4,591	4,728	157	500	34,762	45,362
Lower Atlantic States								
Florida	0	0	11,437	11,194	235	289	96,950	98,717
Georgia	0	0	2,973	3,484	42	104	8,511	13,375
North Carolina	0	0	54	100	2	112	9,115	11,892
South Carolina	5	6	811	747	0	44	7,126	11,245
Virginia	2	4	4,288	4,181	93	36	24,690	34,018
West Virginia	0	1	0	0	0	0	1,466	1,982
PAD 1 Total	**452**	**23**	**53,579**	**49,768**	**1,937**	**11,811**	**475,824**	**549,380**
PAD District 2								
Illinois	9	19	0	0	143	1,074	28,394	27,717
Indiana	0	0	127	102	24	261	14,644	17,401
Iowa	0	0	0	0	0	85	367	896
Kansas	2	26	0	0	0	11	1,063	5,006
Kentucky	0	0	0	0	0	0	1,014	1,230
Michigan	32	23	176	155	37	13	12,011	18,799
Minnesota	0	0	926	354	27	180	3,095	2,782
Missouri	0	2	0	0	0	37	1,426	3,375
Nebraska	0	14	0	0	0	0	78	633
North Dakota	0	0	0	0	42	8	717	858
Ohio	0	0	256	720	211	886	6,405	10,199
Oklahoma	0	0	0	0	0	0	733	877
South Dakota	0	0	0	0	11	5	118	175
Tennessee	6	0	0	61	72	1	1,502	2,417
Wisconsin	43	41	178	287	32	58	1,783	2,025
PAD 2 Total	**92**	**125**	**1,663**	**1,679**	**599**	**2,619**	**73,350**	**94,390**
PAD District 3								
Alabama	0	0	2,927	3,553	21	5	7,311	10,329
Arkansas	0	0	0	0	0	0	4,668	11,261
Louisiana	0	0	28,131	21,629	279	828	62,242	59,842
Mississippi	0	0	5,366	2,704	16	0	15,078	23,409
New Mexico	0	0	0	0	5	29	939	561
Texas	87	76	44,880	49,362	620	579	65,392	70,543
PAD 3 Total	**87**	**76**	**81,304**	**77,248**	**941**	**1,441**	**155,630**	**175,945**
PAD District 4								
Colorado	0	3	0	0	27	56	1,787	1,179
Idaho	0	3	0	0	0	0	614	1,235
Montana	0	3	0	0	126	109	4,033	5,706
Utah	0	0	0	0	38	160	3,456	3,161
Wyoming	0	8	0	0	48	117	2,175	2,966
PAD 4 Total	**0**	**17**	**0**	**0**	**239**	**442**	**12,065**	**14,247**
PAD District 5								
Alaska	0	0	0	309	14	0	396	321
Arizona	0	0	0	0	17	24	1,044	5,027
California	0	9	66,330	47,808	14	373	162,125	159,673
Hawaii	0	0	1,395	1,237	252	216	13,234	12,599
Nevada	0	0	0	0	0	0	2,502	1,541
Oregon	0	1	1,105	3,773	18	4	4,520	5,505
Washington	0	0	7,755	8,721	22	41	17,336	12,929
PAD 5 Total	**0**	**10**	**76,585**	**61,848**	**337**	**658**	**201,157**	**197,595**
U.S. Total	631	251	213,131	190,543	4,053	16,971	913,026	1,031,557

(a) Preliminary; (b) Final.

Source: Deliveries of Fuel Oil and Kerosine in 1980. Department of Energy, February 1982. See caveat on distillate fuel oil deliveries footnote.

Kerosine Sales in 1980

(Add 000 bbl.)

Destination	Residential		Commercial		Industrial		Farm		Other		Total	
	1980(a)	1979(b)	1980(a)	1979(b)	1980(a)	1979(b)	1980(a)	1979(b)	1980(a)	1979(b)	1980(a)	1979(b)
PAD District 1												
New England States												
Connecticut	233	201	7	7	8	9	0	0	243	155	491	372
Maine	405	541	70	26	12	8	4	0	13	28	504	603
Massachusetts	323	483	30	36	13	14	0	5	332	305	698	793
New Hampshire	322	216	9	8	0	0	0	1	9	11	340	236
Rhode Island	54	46	0	1	4	5	0	0	26	44	84	96
Vermont	230	324	44	20	0	28	5	10	4	5	283	387
Central Atlantic States												
Delaware	275	263	9	37	0	1	13	10	4	5	301	316
District of Columbia	5	2	1	1	1	1	0	0	261	294	268	298
Maryland	830	1,082	20	35	11	12	11	10	296	333	1,168	1,472
New Jersey	262	247	39	96	64	92	0	1	1,329	1,525	1,694	1,961
New York	1,723	1,962	169	220	56	94	32	26	329	1,319	2,309	3,621
Pennsylvania	2,362	2,040	193	178	90	100	44	42	74	577	2,763	2,937
Lower Atlantic States												
Florida	774	974	28	54	12	13	0	17	138	133	952	1,191
Georgia	91	77	12	25	22	20	0	2	427	349	552	473
North Carolina	2,747	3,106	118	74	37	50	282	292	75	144	3,259	3,666
South Carolina	1,200	974	25	26	50	44	45	67	32	39	1,352	1,150
Virginia	1,403	2,302	46	46	57	52	41	116	169	211	1,716	2,727
West Virginia	408	664	37	34	15	35	4	1	32	67	496	801
PAD 1 Total	**13,647**	**15,454**	**857**	**924**	**452**	**578**	**481**	**600**	**3,793**	**5,544**	**19,230**	**23,100**
PAD District 2												
Illinois	161	419	16	16	238	294	10	26	181	165	606	920
Indiana	492	535	31	52	16	15	73	22	47	175	659	799
Iowa	47	245	5	10	21	0	41	100	57	105	171	460
Kansas	5	329	10	94	36	6	192	43	249	326	492	798
Kentucky	1,751	2,075	622	408	140	315	0	106	399	641	2,912	3,545
Michigan	83	142	15	105	104	272	5	10	1,026	1,006	1,233	1,535
Minnesota	114	97	0	21	0	11	10	53	88	35	212	217
Missouri	57	45	171	283	5	11	41	43	41	80	315	462
Nebraska	10	26	21	5	0	6	21	10	10	10	62	57
North Dakota	5	0	0	0	0	0	10	0	0	0	15	0
Ohio	1,016	1,618	130	84	337	741	249	174	720	956	2,452	3,573
Oklahoma	21	6	15	27	26	32	0	169	280	411	342	645
South Dakota	10	13	0	0	5	0	0	22	0	0	15	35
Tennessee	549	773	104	152	72	325	11	36	798	1,091	1,534	2,377
Wisconsin	124	122	57	10	41	84	0	0	0	5	222	221
PAD 2 Total	**4,445**	**6,445**	**1,197**	**1,267**	**1,041**	**2,112**	**663**	**814**	**3,896**	**5,006**	**11,242**	**15,644**
PAD District 3												
Alabama	198	136	176	246	110	116	0	11	769	627	1,253	1,136
Arkansas	0	73	132	45	176	128	22	53	241	189	571	488
Louisiana	0	31	549	692	1,779	321	66	11	3,317	2,132	5,711	3,187
Mississippi	44	10	0	0	44	43	0	0	154	687	242	740
New Mexico	132	42	659	11	109	523	0	0	439	319	1,339	895
Texas	198	94	3,251	10,172	2,900	1,280	725	118	8,281	6,006	15,355	17,670
PAD 3 Total	**572**	**386**	**4,767**	**11,166**	**5,118**	**2,411**	**813**	**193**	**13,201**	**9,960**	**24,471**	**24,116**
PAD District 4												
Colorado	23	25	6	33	212	25	23	9	149	184	413	276
Idaho	0	0	0	17	0	0	0	0	0	108	0	125
Montana	0	0	0	17	0	0	0	0	0	0	0	17
Utah	0	8	34	58	17	92	0	0	51	0	102	158
Wyoming	0	9	23	34	33	8	6	0	0	42	62	93
PAD 4 Total	**23**	**42**	**63**	**159**	**262**	**125**	**29**	**9**	**200**	**334**	**577**	**669**
PAD District 5												
Alaska	0	761	0	0	0	0	0	0	19	291	19	1,052
Arizona	0	61	0	11	55	11	9	0	9	17	73	100
California	18	79	222	243	1,609	83	74	24	194	2,996	2,117	3,425
Hawaii	0	0	0	6	0	0	0	6	9	28	9	40
Nevada	0	0	0	6	0	0	0	0	0	0	0	6
Oregon	37	63	37	45	19	17	0	0	19	35	112	160
Washington	65	135	18	17	0	5	0	0	37	101	120	258
PAD 5 Total	**120**	**1,099**	**277**	**328**	**1,683**	**116**	**83**	**30**	**287**	**3,468**	**2,450**	**5,041**
U.S. Total	**18,807**	**23,426**	**7,161**	**13,844**	**8,556**	**5,342**	**2,069**	**1,646**	**21,377**	**24,312**	**57,970**	**68,570**

(a) Preliminary; (b) Final.

Source: Deliveries of Fuel Oil and Kerosine in 1980. Department of Energy, February, 1982. See caveat on distillate fuel oil deliveries footnote.

U.S. Sales of Distillate Fuel Oil By Uses (a)

(Add 000 bbl.)

Year	Residential	Commercial	Industrial	Farm	Oil Company	Electric Utilities	Diesel	Other	Total
1980 (a)	224,902 (b)	88,471 (b)	79,092 (c)	65,595 (d)	18,071 (c)	31,812	368,456 (e)	172,576 (f)	1,048,975
1979 (a)	274,639 (b)	98,557 (b)	97,325 (c)	83,715 (d)	20,065 (c)	46,579	390,504 (e)	197,072 (f)	1,208,456

(a) In 1979, DOE changed its sampling and reporting formulas. It eliminated the "heating oils" category and added a new farm category. The sum of the first four categories is roughly related to the old heating oil category but cannot be considered comparable; (b) Primarily space and water heating; (c) Includes some space heating but primarily equipment fuel; (d) Includes space and water heating, crop drying, farm equipment, etc.; (e) Includes 323,431,000 on-highway and 45,025,000 off-highway in 1980, and 327,402,000 on-highway and 65,102,000 off-highway in 1979; (f) Includes 105,841,000 railroad, 28,166,000 vessel bunkering, 20,152,000 military and 18,412,000 miscellaneous in 1980, and 106,652,000 railroad, 38,826,000 vessel bunkering, 17,810,000 military and 33,784,000 miscellaneous in 1979. The pre-1979 categories follow.

Year	Heating Oils	Industrial Use	Oil Company Use	Electric Utilities	Railroads	Vessel Bunkering	Military Use	Diesel Fuel	All Other	Total
1978	533,069	94,797	19,410	77,175	99,841	37,591	20,320	367,799	14,509	1,257,061
1977	538,845	96,502	19,954	76,681	99,306	33,512	20,121	330,864	14,394	1,230,179
1976	543,895	79,956	14,523	60,570	97,467	28,330	17,574	297,249	11,365	1,150,929
1975	488,388	63,993	13,633	63,420	93,191	26,138	18,004	266,903	10,096	1,043,746
1970	521,135	43,668	11,518	24,770	88,416	19,503	12,447	194,919	10,874	927,250
1965	475,992	42,484	10,430	3,661	86,436	15,532	14,953	124,122	13,281	786,891
1960	438,010	34,271	8,347	4,742	86,490	18,730	10,793	74,562	7,380	683,325

Source: Deliveries of Fuel Oil and Kerosine in 1980, Department of Energy, February 1982.

U.S. Sales of Residual Fuel Oil By Uses (a)

(Add 000 bbl.)

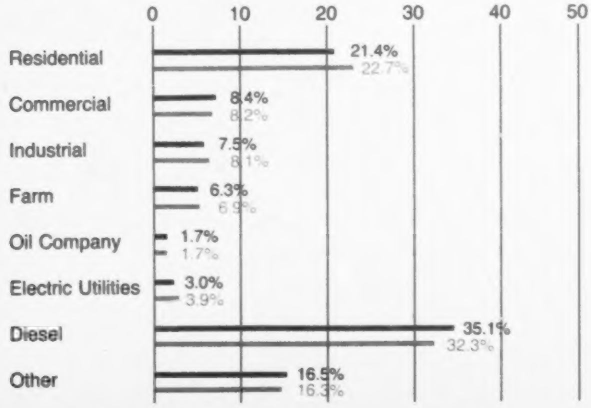
Year	Vessel Bunkering	Electric Utilities	Railroads	Oil Company	Industrial	Commercial	Military	Other	Total
1980 (a)	213,131	390,105	631	56,409	154,568	90,005	9,124	4,053	918,026
1979 (a)	190,543	486,636	251	51,308	197,914	81,216	6,718	16,971	1,031,557

(a) In 1979, DOE changed its sampling and reporting formulas in such a way that most of the new data are not directly comparable to the pre-1979 data, which follows.

Year	Vessel Bunkering	Electric Utilities	Railroads	Oil Company	Industrial Use	Heating Oils	Military Use	All Other	Total
1978	157,495	533,193	206	57,690	169,403	164,536	16,583	4,127	1,103,233
1977	128,966	569,429	329	60,582	171,967	168,279	16,646	4,729	1,129,927
1976	117,458	492,974	423	58,212	153,596	178,139	18,561	5,785	1,025,148
1975	96,673	454,935	583	50,487	116,675	154,103	19,068	6,066	898,572
1970	89,850	312,420	2,222	38,318	139,647	185,031	28,704	7,925	804,287
1965	73,639	114,884	4,001	34,354	140,602	156,254	40,380	10,004	574,118
1960	94,084	85,408	5,610	45,061	157,270	125,088	31,724	6,291	550,536

Sales of Distillates by Use as Percent of Total

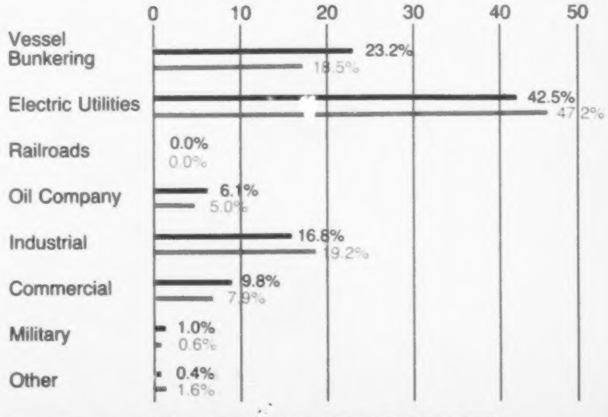
1980 = 1,048,975,000 bbl. 1979 = 1,208,456,000 bbl.



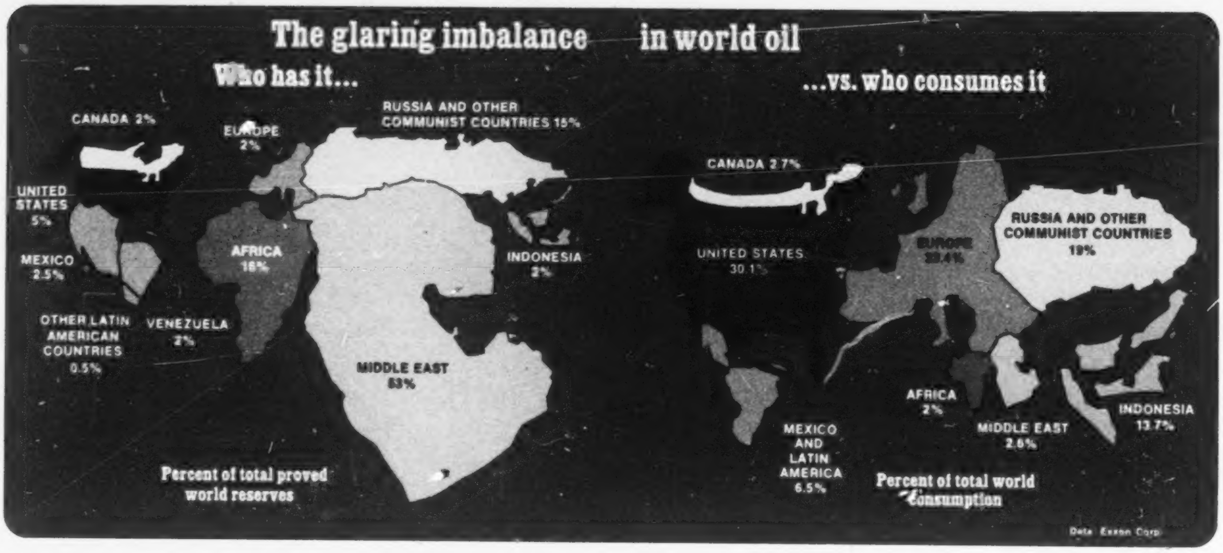
Source: Department of Energy, Deliveries of Fuel Oil and Kerosine in 1980.

Sales of Residuals by Use as Percent of Total

1980 = 918,026,000 bbl. 1979 = 1,031,557,000 bbl.



Source: Department of Energy, Deliveries of Fuel Oil and Kerosine in 1980.


The glaring imbalance in world oil
Who has it...
...vs. who consumes it
CANADA 2%
EUROPE 2%
RUSSIA AND OTHER COMMUNIST COUNTRIES 15%
UNITED STATES 5%
MEXICO 2.5%
AFRICA 16%
INDONESIA 2%
OTHER LATIN AMERICAN COUNTRIES 0.5%
VENEZUELA 2%
MIDDLE EAST 63%
Percent of total proved world reserves
CANADA 2.7%
UNITED STATES 30.1%
EUROPE 23.4%
RUSSIA AND OTHER COMMUNIST COUNTRIES 19%
AFRICA 2%
MEXICO AND LATIN AMERICA 6.5%
MIDDLE EAST 2.6%
INDONESIA 13.7%
Percent of total world consumption

Data: Exxon Corp.

World Crude-Oil Reserves by Area (a)

(Add 000 bbl.)

Year	United States	Canada	Latin America	Middle East	Africa	Asia	Western Europe	Total World (b)
1981	26,400,000	6,400,000	69,489,837	362,071,000	55,148,375	19,630,500	23,085,000	562,224,712
1980	27,051,289	6,800,000	56,472,500	361,947,300	57,072,100	19,355,200	23,476,400	642,174,789
1979	27,803,760	6,860,000	41,246,500	369.996,000	57,892,125	20,007,200	23,966,000	641,907,585
1978	29,486,402	5,970,872	40,370,000	366,166,000	59,200,150	19,749,270	26,862,500	645,805,194

(a) As of Jan. 1, 1981; (b) Includes 86.3-billion in 1981, and 90-billion bbl. in 1980, and 34-billion bbl. in 1979, and 98-billion bbl. in 1978 for USSR and satellite countries.

Source: Department of Energy American Petroleum Institute Basic Data Book.

World Oil Production by Area

(Add 000 bbl.)

Year	United States (a)	Canada	Latin America	Middle East	Africa	Asia	Total Free World	Total World
1980	3,149,064	518,256	2,045,940	6,735,132	2,213,568	999,912	16,555,278	21,770,046
1979	3,114,545	546,040	1,917,710	7,867,940	2,417,395	1,028,935	17,721,115	22,839,145
1978	3,175,927	483,260	1,736,427	7,884,927	2,233,791	1,037,520	17,195,001	22,158,251
1977	3,009,265	482,021	1,649,640	8,118,037	2,292,558	1,016,688	17,033,632	21,826,249

(a) Includes lease condensate.

Source: Department of Energy American Petroleum Institute Basic Data Book.

World Crude-Oil Refining Capacity by Area (a)

Year	United States	Other Western Hemisphere	Total Western Hemisphere	Middle East	Africa	Asia	Europe	Total Free World	Sino Soviet Bloc	Total World
1981	18,400,000	10,716,881	29,116,881	3,729,646	1,697,658	10,554,691	20,205,799	65,304,675	16,036,500	81,341,175
1980	17,825,967	10,683,671	28,509,638	3,518,080	1,666,108	10,386,375	20,243,747	64,323,948	15,346,000	79,666,948
1979	17,440,885	10,273,000	27,713,915	3,546,029	1,667,608	10,248,966	20,328,614	63,541,132	14,748,000	78,289,132
1978	17,047,724	10,592,020	27,352,020	3,506,484	1,467,157	10,176,819	20,728,204	63,352,984	13,938,000	77,290,984

(a) As of Jan. 1, 1981 on a b/d basis

Source: American Petroleum Institute Basic Data Book.

World Natural-Gas Production by Area

(000,000 cubic feet)

Year	United States	Canada	Latin America	Western Hemisphere Total	Middle East	Africa	Asia	Western Europe	Total World
1980	20,090,000	2,688,300	3,297,500	26,055,800	1,221,300	884,700	2,558,400	6,668,700	58,458,800
1979	20,471,260	3,646,500	2,610,000	26,727,760	1,624,700	1,027,900	1,827,900	6,866,800	57,666,460
1978	19,974,033	3,133,100	2,535,500	25,640,633	2,640,400	1,158,160	1,640,000	4,793,700	53,911,133
1977	20,025,463	3,160,525	1,828,267	25,024,255	1,463,111	959,152	1,366,201	6,527,278	47,207,325
1976	19,952,438	3,067,353	1,722,106	24,741,897	1,492,772	905,792	1,173,878	6,343,593	49,459,213
1975	20,108,661	3,075,693	1,735,060	24,919,414	1,436,210	670,402	938,365	5,966,659	47,207,325

Source: Department of Energy/American Petroleum Institute Basic Data Book.

Estimated Crude Oil Reserves for 20 Leading Nations

Nation	(Add 000 bbl.) Reserves 1981(a)	1980(a)	% of Free World Reserves 1981	1980	% of Total World Reserves 1981	1980
1. Saudi Arabia (b)	165,000,000	163,350,000	29.3%	29.6%	25.4%	25.4%
2. Kuwait (b)	64,900,000	67,000,000	11.5	—	10.0	10.4
3. U.S.S.R.	63,000,000	65,400,000	—	11.8	9.7	10.2
4. Iran	57,500,000	58,000,000	10.2	10.5	8.9	9.0
5. Mexico	44,000,000	31,250,000	7.8	5.7	6.8	4.9
6. Iraq	30,000,000	31,000,000	5.3	5.6	4.6	4.8
7. Abu Dhabi	29,000,000	28,000,000	5.2	5.1	4.5	4.4
8. U.S.A.	26,400,000	27,051,289	4.7	4.9	4.1	4.2
9. Libya	23,000,000	23,500,000	4.1	4.3	3.5	3.7
10. China	20,500,000	20,000,000	—	—	3.2	3.1
11. Venezuela	17,950,000	17,870,000	3.2	3.2	2.8	2.8
12. Nigeria	16,700,000	17,400,000	3.0	3.2	2.6	2.7
13. United Kingdom	14,800,000	15,400,000	2.6	2.8	2.3	2.4
14. Indonesia	9,500,000	9,600,000	1.7	1.7	1.5	1.5
15. Algeria	8,200,000	8,440,000	1.5	1.5	1.3	1.3
16. Canada	6,400,000	6,800,000	1.1	1.2	1.0	1.1
17. Norway	5,500,000	5,750,000	1.0	1.0	0.8	0.9
18. Qatar	3,585,000	3,760,000	0.6	0.7	0.6	0.6
19. Malaysia	3,000,000	3,100,000	0.5	0.6	0.5	0.5
20. Egypt (c)	2,900,000	2,800,000	0.5	0.5	0.4	0.4
Total Free World	**562,224,712**	**552,174,789**	**100.0%**	**100.0%**	**86.7%**	**86.0%**
Total World	**648,524,712**	**642,174,789**	—	—	**100.0%**	**100.0%**

(a) As of Jan. 1, 1981 and Jan. 1, 1980. (b) Saudi Arabia and Kuwait share equally the production from the Neutral Zone located between the two nations which had reserves of 6.5-million bbl. in 1981 and 6.3-million bbl. in 1980. These reserves are not included in the above figures; (c) Includes Gulf of Suez fields returned by Israel in 1979.

Source: American Petroleum Institute Basic Data Book.

Crude Production in 20 Leading Nations

Nation	Production (Add 000 bbl.) 1980 Total	1980 b/d	1979 Total	1979 b/d	% of Free World Production 1980	1979	% of Total World Production 1980	1979
1. U.S.S.R.	4,289,520	11,720	4,187,280	11,472	—	—	19.7%	18.2%
2. Saudi Arabia	3,523,116	9,626	3,376,615	9,251	21.3%	18.9%	16.2	14.2
3. United States (a)	3,149,064	8,604	3,114,545	8,533	19.0	17.4	14.5	13.6
4. Iraq	920,124	2,514	1,269,105	3,477	5.6	7.1	4.2	5.5
5. Venezuela	793,122	2,167	1,156,320	3,168	4.8	6.5	3.6	5.0
6. People's Rep. of China	773,724	2,114	859,940	2,356	—	4.8	3.6	3.7
7. Nigeria	752,130	2,055	840,230	2,302	4.5	4.7	3.5	3.7
8. Mexico (a)	708,942	1,937	807,745	2,213	4.3	4.5	3.3	3.5
9. Libya	654,042	1,787	774,530	2,122	4.0	4.3	3.0	3.4
10. United Arab Emirates	625,494	1,709	763,580	2,092	3.8	4.3	2.9	3.3
11. Iran	608,292	1,662	668,315	1,831	3.7	3.7	2.8	2.9
12. United Kingdom	592,554	1,619	580,715	1,591	3.6	3.3	2.7	2.5
13. Indonesia	577,182	1,577	572,320	1,568	3.5	3.2	2.7	2.5
14. Canada (a)	518,256	1,416	546,040	1,496	3.1	3.1	2.4	2.4
15. Kuwait	507,642	1,387	533,265	1,461	3.1	3.0	2.3	2.3
16. Algeria (a)	379,542	1,037	415,005	1,137	2.3	2.3	1.7	1.8
17. Egypt	217,770	595	207,320	568	1.3	1.2	1.0	0.9
18. Neutral Zone	196,908	538	191,625	525	1.2	1.1	0.9	0.8
19. Norway	193,248	528	187,975	515	1.2	1.1	0.9	0.8
20. Brunei-Malaysia	189,588	518	185,420	508	1.1	1.0	0.9	0.8
Total Free World	**16,555,278**	**45,233**	**17,852,515**	**48,911**	**100.0%**	**100.0%**	**76.0%**	**77.7%**
Total World	**21,770,046**	**59,481**	**22,970,545**	**62,933**	—	—	**100.0%**	**100.0%**

(a) Includes lease condensate.

Source: American Petroleum Institute Basic Data Book.

World Reserves of Crude Oil (a) (Add 000,000 bbl.)

Year	United States	Canada	Latin America	Total Western Hemisphere	Middle East	Africa	Asia-Pacific	Western Europe	Total Free World	Total World (b)
1979	27,803,760	6,860,000	41,246,500	75,910,260	369,996,000	57,892,125	20,007,200	23,966,000	547,771,585	641,771,585
1980	27,051,289	6,800,000	56,472,500	90,323,789	361,947,300	57,072,100	19,355,200	23,476,400	522,174,789	642,174,789
1981	26,400,000	6,400,000	69,489,837	102,289,837	362,071,000	55,148,375	19,630,500	23,085,000	562,224,712	648,524,712

(a) As of Jan. 1 of each year; (b) Total world includes estimated reserves for communist nations as follows: 1979—94-billion bbl.; 1980—90-billion bbl.; 1981—86.3-billion bbl.

Source: American Petroleum Institute Basic Data Book.

Canadian Oil Companies: How

Company	TOTAL BRANDED RETAIL OUTLETS	Number of Provinces where marketed	BRANDED SERVICE STATIONS: Total branded service stations	Supplied directly	Supplied through jobbers & commission agents	Lessee/Dealer operated	Salary operated	Commission operated	100% Full service	100% Self-service	Service and self-service
BP Canada, Inc.	1,661	2	1,661	1,385	276	1,062	—	599	1,406	253	2
Caloil, Inc. (A)	85	2	85	85	—	27	—	58	82	3	—
Chevron Canada Ltd.	331	1	290	162	128	233	—	57	227	60	3
Federated Co-ops Ltd.	724	4	384	384	—	384	—	—	—	116	268
Gulf Canada Ltd. (A	2,715	10	2,715	—	—	2,551	164	—	2,360	354	1
Husky Oil Ltd.	330	6	330	330	0	330	0	0	263	27	5
Imperial Oil Ltd.	3,719	10	3,719	2,469	1,250	3,216	80	423	3,192	527	—
Irving Oil Ltd. (B)	—	—	—	—	—	—	—	—	—	—	—
Mohawk Oil Co. Ltd.	257	5	257	257	0	191	59	7	204	50	3
Petro-Canada Exploration, Inc. (A)	352	5	352	272	80	297	—	55	267	74	11
Petrofina Canada, Inc.	932	5	932	932	0	860	36	36	828	104	0
Shell Canada Ltd.	3,628	9	3,628	2,557	1,071	3,080	127	421	3,099	529	NA
Spur Oil Ltd. (A)	138	2	97	—	—	97	—	—	87	10	—
Sunoco, Inc.	870	2	821	801	20	125	140	2	680	140	1
Texaco Canada, Ltd.	2,913	10	2,913	2,913	—	2,441	—	472	2,441	472	—
Turbo Resources Ltd.	304	5	293	218	63	187	1	93	224	10	—
Top Valu Gasmarts	120	2	120	120	—	58	20	42	116	3	1
Ultramar Canada, Inc.	842	3	842	842	—	808	34	—	824	10	8

(A) Most recent information available; company did not respond to 1982 questionnaire.
(B) Irving refuses to disclose any of its operational details.

Source: NPN Questionnaires.

Brand Names of Gasoline and Motor Oil

BP Canada, Inc.

Gasolines	Motor Oils
BP Regular (r) BP No-Lead (xr) BP Super No-Lead (xp)	BP Vanellus CC BP Energol HD BP Vanellus MCS-3 BP Vanellus C-3 Extra BP Super Engine Oil Super Visco Static Super Visco Static 5W 40

Caloil Inc.

Gasolines	Motor Oils
Calex (r) Calex Unleaded (xr&xp)	

Chevron Canada Ltd.

Gasolines	Motor Oils
Chevron Regular (r&xr) Chevron Premium (p) Chevron Supreme (xp)	Chevron Special Chevron Supreme Chevron Custom Chevron Delo

Federated Co-Ops Ltd.

Gasolines	Motor Oils
Sonic (r&p) (xr&xp)	HD 7 D-MO Sonic Prem. Multrex

Gulf Canada Ltd.

Gasolines	Motor Oils
Gulf (r, xsp)	Gulf Premium Multigrade Super Premium Multigrade

Husky Oil Ltd.

Gasolines	Motor Oils
Husky (r&p) Husky (x)	Husky Superlube Husky Heavy Duty Husky HD Special Husky Stratolube Husky Stratolube "6000"

Imperial Oil Ltd.

Gasolines	Motor Oils
Esso (r) Esso 2000 (xr) Esso Extra Unleaded (xp)	Essolube HD Essolube HDX Plus Essolube HD 3 Esso Plus Esso Extra Uniflo

Mohawk Oil Co. Ltd.

Gasolines	Motor Oils
Mohawk (r) (xr&xp)	Mohawk Premium Mohawk S. Duty Mohawk MultiGrade 10/30 ATF Dextron Outboard Motor Oil

Murphy Oil Co. Ltd.

Gasolines	Motor Oils
Spur (r) (xr&xp) Gas (r) (xr&xp) (+)	Spur Supreme Spur HD Spur Regular Spur A.T.F. Spur 2 Stroke

Petro-Canada Exploration

Gasolines	Motor Oils
Pacific 66 (r, xr&xp)	MM Petro-Lube Heavy Duty Commercial Super Heavy Duty Premium Single Grade Premium All Season

Petrofina Canada Inc.

Gasolines	Motor Oils
Fina Regular (r) Fina Lead-Free (xr) Fina Super 100 Lead-Free (xp)	Regular M.O. Single Grade Dieseltonic H.D. 30 Universal MG 15W40 Heavy Duty 10W 20-20W, 30, 40 Multi 10W30 Multi-Plus 5W30-10W40

Shell Canada Ltd.

Gasolines	Motor Oils
Shell (r) Shell Ultra (x) Shell Super Non-leaded (xp)	Shell X-100 30 Shell X-100 Multigrade 10W/30 Shell Super Plus 5W/30 10W/40 Shell Super Plus Arctic Multigrade 0W/30

Spur Oil Ltd.

Gasolines	Motor Oils
Spur (r) Spur (rx) Spur (px)	Castrol Distributorship Spur Supreme

Sunoco Inc.

Gasolines	Motor Oils
Sunoco Regular (r) (xr) Sunoco ½ + ½ (x) Sunoco Premium (p) (xp)	Dynalube, Pronto Sunfleet, Dieselube Special Cam 2

Texaco Canada Ltd.

Gasolines	Motor Oils
Fire Chief Sky Chief (p) (x) Lead-free Texaco (r) (x)	Havoline Motor Oil Havoline 10W-30 Havoline 5W-30 Super Premium 10W-40

Top Value Gasmarts

Gasolines	Motor Oils
Top Valu (r) Top Valu (rx) Top Valu (px) Payless (r +) Payless (r + x)	Burmak Burmak Veedol Castrol

Turbo Resources Ltd.

Gasolines	Motor Oils
Turbo (x) Turbo No-lead (xr&xp) Turbo (px)	Turbo HD 1 Turbo SD 1 Turbo Multi-Service Turbo Supreme

Ultramar Canada Inc.

Gasolines	Motor Oils
Ultramar (r&p)(xr&xp) Ultramar (xsp) XL (r, xr&xp) (+) Arrow (r, xr&xp) (+)	Ultralube Ultralube Monograde HD Ultralube Super Multigrade

Key

Gasoline

(r) Regular

(p) Premium

(sp) Super premium

(x) Unleaded

Motor oil . . . Brand names are listed with lowest price grade first

Distribution Is Organized

BRANDED JOBBERS				COMMISSION AGENTS				BULK PLANTS				TERMINALS			
SELLING . . .				SELLING . . .				COMPANY OPERATED				COMPANY OPERATED			
Total	Gasoline only	Fuel Oil only	Gasoline and fuel oil	Total	Gasoline only	Fuel oil only	Gasoline and Fuel oil	Total	Salary operated	Commission operated	Jobber operated	Total	Salary operated	Commission operated	Jobber operated
3	1	—	2	149	—	3	146	91	1	89	1	1	6	6	0
37	37	—	—	—	—	—	—	3	1	2	4	1	1	0	0
1	—	—	1	49	—	—	49	49	—	49	0	2	2	—	0
—	—	—	—	—	—	—	—	340	340	—	—	—	—	—	—
243	—	—	—	268	—	—	—	104	85	19	268	1	—	—	—
40	—	—	40	0	—	—	—	6	—	—	0	1	1	—	—
0	—	—	—	692	—	2	690	665	—	665	—	63	56	7	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	7	7	—	—	3	—	—	5	—	—	—	—
25	18	—	7	55	54	—	1	—	—	—	—	2	2	—	—
0	—	—	—	123	0	0	123	33	22	11	0	12	12	0	0
306	—	18	288	204	—	—	204	245	45	200	240	25	25	0	0
92	41	48	3	0	—	—	—	3	—	3	3	3	3	—	—
41	—	—	41	2	2	—	—	21	21	—	4	7	7	—	0
0	—	—	—	413	—	—	413	223	29	194	—	35	35	—	0
12	—	—	12	14	—	—	14	20	—	8	12	1	1	—	—
5	—	—	5	42	42	—	—	0	—	—	—	—	—	—	—
—	—	—	—	67	—	—	67	84	84	84	NA	47	47	47	NA

Branded Retail Outlets in Canada

Company	Total	No. of Provinces	Newfoundland	Nova Scotia	New Brunswick	Quebec	Ontario	Prince Edward Island	Manitoba	Saskatchewan	Alberta	British Columbia
BP Canada, Inc.	1,661	2	—	—	—	636	1,025	—	—	—	—	—
Caloil, Inc. (A)	85	2	—	—	—	78	7	—	—	—	—	—
Chevron Canada Ltd.	331	1	—	—	—	—	—	—	—	—	—	331
Federated Co-ops Ltd.	724	4	—	—	—	—	—	—	132	477	91	24
Gulf Canada Ltd. (A)	2,715	10	70	76	60	547	630	6	248	338	425	289
Husky Oil Ltd.	330	6	0	0	0	0	78	0	43	28	95	84
Imperial Oil Ltd.	3,719	10	192	203	175	759	867	45	267	357	389	465
Irving Oil Ltd. (B)	—	—	—	—	—	—	—	—	—	—	—	—
Mohawk Oil Co. Ltd. (A)	257	5	—	—	—	—	5	—	16	16	140	80
Murphy Oil Co. Ltd. (A)	240	2	—	—	—	150	90	—	—	—	—	—
Petro Canada Exploration, Inc. (A)	352	5	—	—	—	—	10	—	29	39	107	163
Petrofina Canada, Inc. (A)	932	5	—	129	87	403	302	11	—	—	—	—
Shell Canada Ltd.	3,628	9	—	125	134	911	1,269	30	304	210	301	344
Spur Oil Ltd. (A)	138	2	—	—	—	130	8	—	—	—	—	—
Sunoco, Inc.	870	2	—	—	—	336	534	—	—	—	—	—
Texaco Canada Ltd.	2,913	10	41	137	150	785	1,082	28	120	139	216	215
Turbo Resources Ltd.	304	5	—	—	—	—	81	—	15	44	112	29
Top-Valu Gasmarts	120	2	—	—	—	28	92	—	—	—	—	—
Ultramar Canada, Inc.	842	3	185	—	—	420	237	—	—	—	—	—

(A) Most recent information available; company did not respond to 1982 questionnaire.
(B) Irving refused to provide any operational details.
Source: NPN Questionnaires

Canadian Statistics

Canadian Motor Vehicle Registrations 1980

Province	Passenger Cars	Trucks	Buses	Motorcycles	Others (a)	Total Vehicles	Trailers
Newfoundland	146,821	60,512	NA	4,856	NA	212,198	23,649
Prince Edward Island	47,608	18,992	433	1,644	73	68,750	6,968
Nova Scotia	364,416	144,476	1,351	18,649	1,126	530,018	53,519
New Brunswick	252,915	89,864	1,557	11,315	8,585	364,236	55,476
Quebec	2,547,500	396,406	16,103	128,670	98,754	3,187,433	399,585
Ontario	3,708,694	812,890	20,620	98,475	7,141	4,647,820	520,602
Manitoba	458,457	180,147	358	16,678	795	656,435	97,079
Saskatchewan	393,205	273,146	4,731	11,754	1,119	683,955	85,301
Alberta	1,141,901	457,011	7,304	52,863	NA	1,659,079	232,745
British Columbia	1,181,147	449,210	NA	42,218	NA	1,672,575	207,807
Yukon	6,778	10,975	NA	580	NA	18,333	4,080
Northwest Territories	6,069	9,092	112	978	69	16,320	2,540
Total	**10,255,511**	**2,902,730**	**52,569**	**388,680**	**117,662**	**13,717,152**	**1,689,351**

(a) Includes Mopeds
Source: Canadian Statistics, 1982

New Motor Vehicle Sales

Year	Passenger Cars	Trucks & Buses	Total
1981	904,195	286,687	1,190,882
1980	932,060	331,747	1,267,807
1979	1,003,008	393,394	1,396,402
1978	988,890	377,645	1,366,544
1977	991,398	353,561	1,344,959
1976	946,488	344,975	1,291,463
1975	989,280	327,349	1,316,629

Source: Statistics Canada

Automobiles Per Household (1981)

	Households (Add 000)			
Province	1 Car	2 Cars	3 or More	Without
Newfoundland	84	19	5	42
Prince Edward Island	20	7	—	6
Nova Scotia	136	48	10	65
New Brunswick	117	42	8	42
Quebec	1,219	344	54	500
Ontario	1,580	705	147	555
Manitoba	181	69	18	80
Saskatchewan	176	76	23	51
Alberta	340	192	54	112
British Columbia	470	244	55	169
Total	**4,322**	**1,745**	**376**	**1,620**

Source: Statistics Canada

Drivers Licenses 1980

Newfoundland	257,000 (a)
Prince Edward Island	28,949
Nova Scotia	468,160
New Brunswick	364,041
Quebec	164,868
Ontario	993,531
Manitoba	564,657
Saskatchewan	603,115
Alberta	1,500,361
British Columbia	1,900,000 (a)
Yukon	16,058
Northwest Territories	16,022
Total	**13,876,762**

(a) Estimates
Source: Statistics Canada

Factory Sales of Car Batteries

	1981	1980
Original Equipment	846,253	NA
Replacement	2,764,319	NA

Source: Statistics Canada

Factory Shipments of Tires (a)

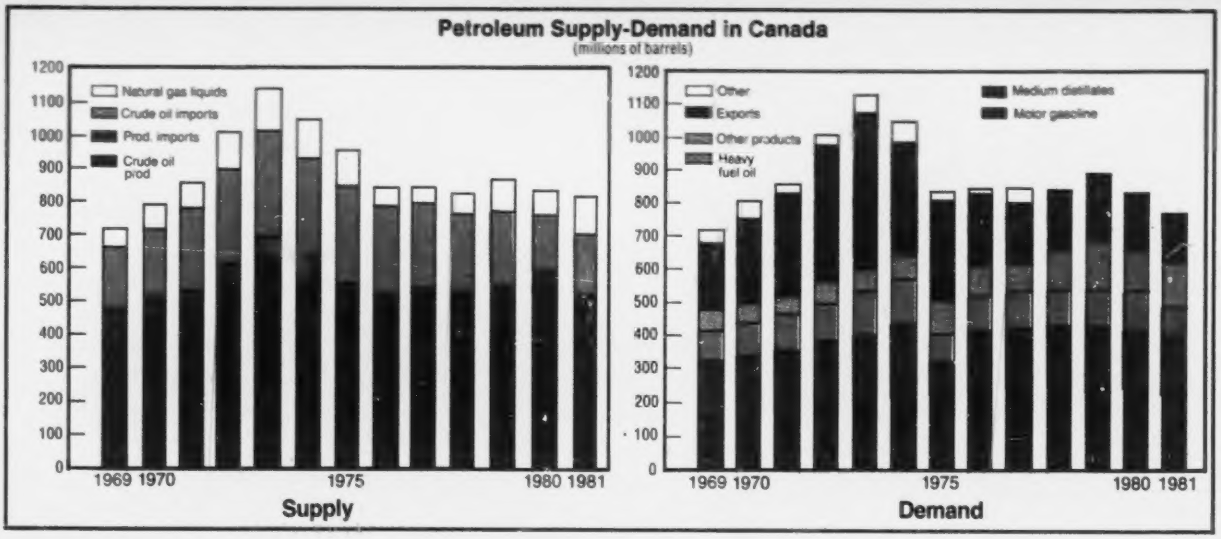
	1979		1978	
	Units	Dollar Value (Add 000)	Units	Dollar Value (Add 000)
Passenger Cars, Belted Bias	5,509,920	$129,750		
Passenger Cars, n.e.s. (b)	2,544,952	59,030	*All 1978 data are confidential except tractor/implements (c)*	
Light Trucks, n.e.s. (b)	1,896,221	78,987		
Buses & Heavy Trucks	960,840	109,498		
Farm Tractors/Implements	600,874	52,674		
Off-Highway n.e.s. (b)	113,103	66,102		
Total	**11,625,910**	**$417,054**		

(a) Most recent information available: (b) Not elsewhere specified; (c) All 1978 data are confidential except tractors/implements which had 833,570 units and a value of $101,695,000.
Source: Statistics Canada

Principal Heating Fuel (1981)

	Households (Add 000)						
Province	Oil	Piped Gas	Bottled Gas	Electricity	Coal Coke	Wood	Total Households
Newfoundland	72	(a)	(a)	41	(a)	18	132
Prince Edward Island	24	(a)	(a)	(a)	(a)	5	30
Nova Scotia	157	(a)	(a)	14	(a)	24	201
New Brunswick	100	(a)	(a)	37	(a)	25	162
Quebec	520	26	(a)	438	(a)	50	1,037
Ontario	760	1,052	14	227	(a)	55	2,112
Manitoba	47	165	(a)	40	(a)	6	260
Saskatchewan	54	200	9	9	(a)	(a)	276
Alberta	14	504	15	(a)	(a)	(a)	541
British Columbia	171	372	6	104	(a)	29	682
Total	**1,917**	**2,320**	**51**	**912**	**12**	**216**	**5,434**

(a) designates amount too small to be measured.
Source: Statistics Canada



Petroleum Supply-Demand in Canada

(millions of barrels)

Refined Product Sales in 1981

Refined product sales in Canada totaled 770.6-million bbl. in 1981, down 7.8% from the 1980 total of 835.9-million bbl. Principal demand figures (see chart above) were: gasoline, 234.2-million bbl.; middle distillates, 172.8-million bbl.; heavy oil, 91.7-million bbl.; other products, 132.2-million bbl.; and exports, 139.6-million bbl. Principal supply figures were crude production, 505.5-million bbl.; product imports, 15.8-million bbl.; crude oil imports, 185.9-million bbl.; and natural gas liquids, 100.9-million bbl. Pentanes amounted to 36.5-million bbl., but are not included in the natural gas liquids total.

(Cubic Meters) (a)

	Aviation Gasoline	Motor Gasoline	Aviation Turbine Fuel	Kerosene Stove Fuel	Diesel Fuel Oil	Light Fuel Oil	Heavy Fuel Oil	Lubes & Greases
Newfoundland	4,848	615,518	214,840	73,770	426,423	370,905	372,824	14,672
Prince Edward Island	1,686	178,548	7,355	18,662	52,722	132,182	31,116	2,478
Nova Scotia	1,187	1,216,101	146,542	93,716	594,531	871,294	1,553,952	27,095
New Brunswick	3,987	1,080,913	53,543	66,382	368,611	608,709	1,663,922	21,590
Québec	30,530	8,164,588	819,463	298,666	2,670,147	4,392,632	5,732,556	176,372
Ontario	48,258	12,874,526	1,309,185	207,292	3,380,535	3,910,972	4,112,995	421,565
Manitoba	24,583	1,542,634	239,952	94,632	765,613	120,705	121,425	34,387
Saskatchewan	16,202	2,000,207	100,215	120,404	1,050,464	164,257	16,045	52,102
Alberta	33,352	5,081,385	777,186	59,263	2,810,692	89,753	23,453	170,086
British Columbia	41,001	4,381,154	677,774	105,112	2,391,020	630,857	1,974,055	110,785
Yukon	4,864	53,685	8,626	34,310	38,073	63,468	43	1,903
Northwest Territories	11,349	41,316	111,068	46,882	191,014	58,626	18,905	1,741
Total 1981	**221,847**	**37,230,575**	**4,464,748**	**1,219,091**	**14,739,845**	**11,414,360**	**15,621,291**	**1,034,776**
Total 1980	**238,188**	**38,474,789**	**4,575,240**	**1,545,616**	**14,977,362**	**13,815,999**	**17,999,947**	**1,061,504**

(a) To translate into imperial bbl., divide cubic meters in each case by 158.9; an imperial bbl. equals 35 imperial gal.; an imperial gal. equals 1.2 U.S. gal.
Source: Statistics Canada.

Gasoline Sales and Premium Ratios

	(1977)*		
		(Add 000)	
Metropolitan Areas	**Outlets**	**Gasoline Sales (gal.)**	**Population (a)**
Montreal	1,575	659,744	2,798
Toronto/Hamilton	1,549	709,342	2,741
Regina	82	50,965	520
Calgary	226	156,591	151
Ottawa/Hull	297	169,241	444
Winnipeg	251	146,793	626
Edmonton	234	171,545	570
Vancouver	447	283,725	529
Total	**4,660**	**2,347,946**	**9,516**

---

*No survey was made in 1978, 1979, 1980 or 1981; these are the most recent figures available.
(a) As of June 1974, most recent data available.
Source: Statistics Canada.

	Premium*	
Province	**December 1981**	**December 1980**
Alberta and Northwest Territories	7.1%	11.5%
British Columbia and Yukon	10.3	11.0
Manitoba	4.0	4.6
Maritimes	10.4	12.1
Newfoundland	6.8	8.9
Ontario	12.5	14.3
Quebec	18.8	25.3
Saskatchewan	3.2	3.8
Total	**11.9%**	**15.1%**

---

*Contains leaded and unleaded premium.
Source: Ethyl Corp., Petroleum Chemicals Div.

LP-Gas Outlook Brightens

Total sales of LP-Gas in 1981 were about the same as those in 1980 but most industry sources expressed belief that the outlook has changed considerably since the decontrol of the light products in January a year ago.

Department of Energy changed its formula and format for gathering LP-G data in 1979 and 1980 so industry experts were wary about providing estimates on 1981 sales until later in the year. Propane sales were especially encouraging, they agreed, due to the new conversion trends.

LPG Sales Trend

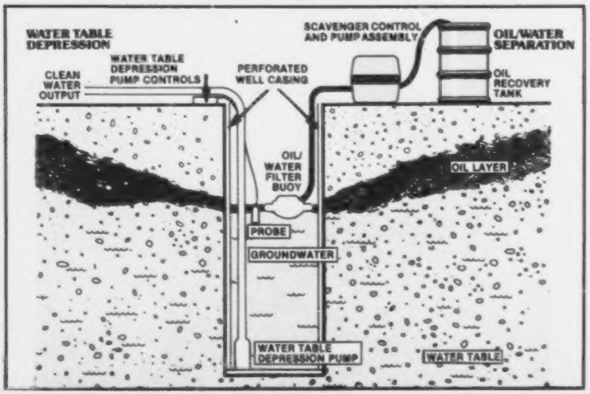
Major Domestic Markets
(Add 000,000 gal.)

	Total U.S. sales		Residential-commercial		Chemical		Internal combustion		Industrial		All other uses	
Year	Vol.	% Change	Vol.	% Change	Vol.	% Change	Vol.	% Change	Vol.	% Change	Vol.	% Change
1980 (a)	18,604	-3.1	4,373	-8.2	7,808	-4.3	508	14.4	2,217	5.3	3,698	-1.0
1979 (a)	19,202	27.8	4,764	-31.5	8,160	129.0	444	-55.3	2,105	57.1	3,728	71.6
1978	15,023	-3.1	6,954	-3.0	3,563	-0.4	993	-13.3	1,340	28.4	2,172	-15.6
1977	15,508	-3.2	7,169	-2.0	3,578	-12.4	1,145	-2.1	1,044	—	2,573	7.5
1976	16,013	5.3	7,313	4.2	4,085	-2.1	1,170	—	1,052	-2.8	2,394	35.8
1975	15,200	-6.8	7,020	-2.9	4,172	-23.0	1,162	-11.3	1,082	1.2	1,763	38.3
1974	16,306	-5.0	7,231	-7.8	5,422	-9.0	1,310	-7.0	1,069	2.4	1,275	46.2
1973	17,812	-1.1	7,846	-5.0	5,960	1.0	1,409	-4.7	1,095	-2.3	872	41.1
1972	17,373	12.1	8,253	7.6	5,898	15.1	1,479	11.7	1,124	23.7	618	30.7
1971	15,498	1.5	7,668	1.3	5,124	2.4	1,324	—	909	1.3	473	1.3
1970	15,271	26.6	7,569	41.6	5,003	24.8	1,336	11.9	897	32.1	467	125.6
1965	11,434	33.7	5,346	26.5	4,008	54.6	1,194	33.0	679	13.9	207	-23.0
1960	8,579	40.1	4,225	50.8	2,593	36.5	898	37.7	596	13.7	269	9.3
1955	6,123	75.8	2,801	38.5	1,899	122.6	652	401.5	524	241.6	246	-7.7
1950	3,433	—	2,022	—	853	—	130	—	217	—	260	—

(a) This data has been revised by DOE and is not comparable to the data appearing in pre-1979 data appearing above.

Source: Department of Energy, Energy Information Administration, Sales of LPG and Ethane in 1980, issued December, 1981.

A Safe, Effective Way to Remove Flammable Petroleum Products from Groundwater



Gasoline and oil leaks into groundwater are potentially dangerous. When petroleum reaches groundwater, it moves laterally at varying speeds. A single 1/8" stream becomes almost 100,000 gallons a year. That's a substantial unseen fire hazard.

This material can be safely and effectively removed with the Scavenger System. The Scavenger is a portable oil/water separator that features a unique filter cartridge — it repels water but allows oil to pass through and be recovered. The Water Table Depression Pump is a submersible pump with a probe that automatically pumps only water from the well, to aid in the recovery.

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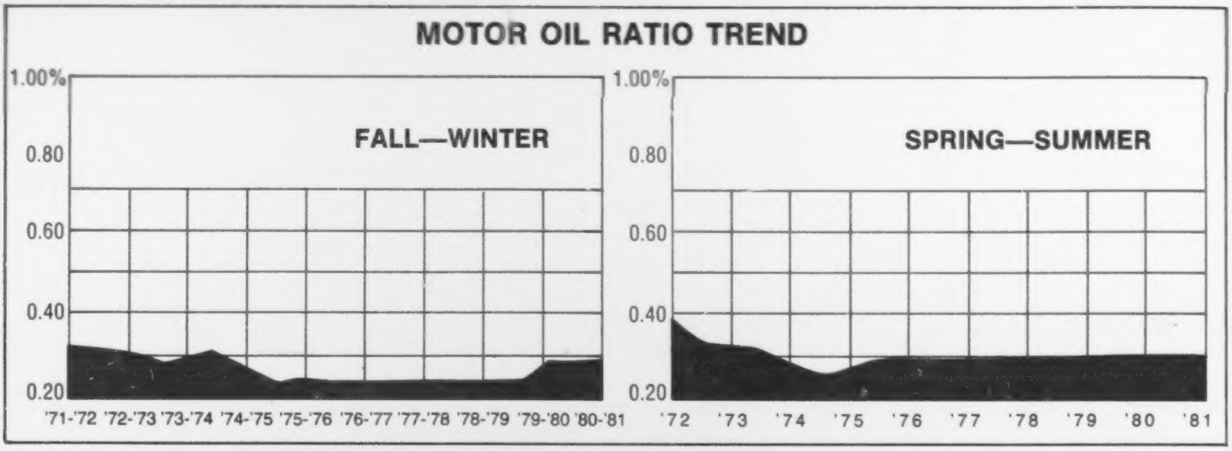
Sales of Liquefied Petroleum Gases, by Use (a)

P.A.D. District and State	Residential and Commercial		Internal Combustion Engine Fuel		Industrial		Total (b)	
	1980	1979	1980	1979	1980	1979	1980	1979
District I								
Connecticut	29,421	27,012	1,628	1,432	W	W	51,909	48,575
Delaware	18,514	W	1,532	1,018	5,137	W	110,647	235,552
Florida	219,085	217,978	17,775	11,687	42,120	36,634	370,742	286,783
Georgia	W	W	8,376	10,489	20,827	W	257,479	253,650
Maine	19,535	45,797	1,013	R 543	6,857	7,404	30,227	W
Maryland and District of Columbia	W	W	2,928	2,338	W	12,889	71,405	67,864
Massachusetts	33,349	31,893	2,918	3,037	8,420	6,785	73,515	73,829
New Hampshire	29,072	27,640	W	W	6,441	6,262	44,278	45,571
New Jersey	38,391	39,410	W	W	W	W	255,369	261,503
New York	W	W	8,706	9,039	W	W	194,784	187,154
North Carolina	140,625	131,619	5,564	5,759	24,856	25,500	276,006	260,181
Pennsylvania	W	W	16,272	13,455	120,447	140,479	250,951	281,271
Rhode Island	5,672	5,405	982	958	2,349	2,397	10,146	10,472
South Carolina	74,608	71,828	3,676	4,018	7,695	5,941	W	W
Vermont	17,590	15,993	256	188	2,284	1,174	W	W
Virginia	74,421	67,261	5,218	6,904	W	16,270	W	W
West Virginia	19,540	20,625	1,566	1,590	W	W	118,809	103,053
Total	**1,134,575**	**1,150,334**	**90,941**	**83,661**	**423,120**	**425,258**	**2,357,531**	**2,401,724**
District 2								
Illinois	200,178	254,528	19,648	20,419	W	W	1,342,506	1,711,367
Indiana	165,596	192,050	9,689	10,528	17,671	24,400	275,369	313,117
Iowa	192,202	249,014	3,791	3,040	W	24,391	386,291	485,359
Kansas	102,908	121,617	12,201	12,954	23,905	W	290,718	325,936
Kentucky	101,919	114,424	W	W	101,525	14,420	353,619	355,637
Michigan	166,749	169,213	14,181	17,497	W	24,340	232,994	248,343
Minnesota	144,727	160,605	7,466	5,280	W	W	266,239	281,219
Missouri	W	348,873	7,483	6,355	12,795	20,497	315,519	447,728
Nebraska	W	W	W	W	W	10,728	155,631	154,733
North Dakota	25,238	38,134	1,272	525	5,271	643	45,046	56,551
Ohio	126,312	157,307	24,901	18,256	225,509	248,030	1,531,116	1,541,193
Oklahoma	86,909	93,249	26,007	12,953	12,823	W	310,884	278,829
South Dakota	57,584	54,097	7,614	4,721	931	1,589	87,508	81,060
Tennessee	W	W	6,702	8,061	10,834	W	96,391	99,416
Wisconsin	147,380	151,398	9,249	10,381	W	W	208,808	227,636
Total	**1,907,925**	**2,253,147**	**170,494**	**146,830**	**556,133**	**583,591**	**5,898,639**	**6,608,124**
District 3								
Alabama	W	W	5,136	W	8,975	W	171,182	190,234
Arkansas	W	W	W	W	15,676	10,627	167,662	166,570
Louisiana	56,691	63,054	W	W	248,799	296,193	1,828,889	2,126,320
Mississippi	108,753	111,841	16,819	W	24,338	8,244	196,949	197,379
New Mexico	59,728	62,111	W	W	7,072	6,133	162,936	148,598
Texas	302,961	302,928	W	61,258	716,696	W	6,565,445	6,022,586
Total	**761,890**	**795,725**	**136,983**	**114,914**	**1,021,556**	**888,951**	**9,093,063**	**8,851,687**
District 4								
Colorado	W	W	W	W	15,245	14,375	133,872	129,048
Idaho	15,612	18,316	2,572	2,211	4,283	4,023	34,365	37,728
Montana	40,948	29,923	5,015	1,394	W	W	62,488	36,150
Utah	17,241	15,781	1,599	788	W	W	44,998	54,805
Wyoming	31,818	33,713	8,095	5,179	5,328	3,996	70,215	68,341
Total	**W**	**W**	**W**	**W**	**32,031**	**28,376**	**345,938**	**326,072**
District 5								
Alaska	W	W	W	W	W	W	6,602	6,359
Arizona	32,443	W	8,630	W	W	W	54,967	57,482
California	243,074	246,914	57,711	W	148,801	W	664,045	765,030
Hawaii	W	W	W	W	W	W	54,400	52,327
Nevada	21,104	19,852	W	W	2,176	1,572	30,446	28,101
Oregon	28,339	30,059	7,158	7,531	W	2,427	46,821	48,434
Washington	30,952	28,004	10,135	9,158	W	W	51,430	50,302
Total	**W**	**W**	**87,294**	**84,926**	**184,569**	**179,210**	**908,711**	**1,008,035**
U.S. Total	**4,372,576**	**4,764,402**	**508,011**	**443,732**	**2,217,409**	**2,105,386**	**18,603,882**	**19,201,642**

(a) Excludes use in gasoline production; (b) Total includes gas utility, chemical and miscellaneous uses; (w) Data withheld by DOE to avoid disclosing individual company data. These data are included in totals.
Source: Department of Energy, Sales of Liquefied Petroleum Gases and Ethane in 1980, released December, 1981.



Motor Oil Ratios Vary Slightly

The service-station motor-oil ratio in the spring-summer period of 1981 stabilized after moving upward slightly in the preceding seasonal period. The fall-winter ratio also showed little movement, according to NPN's annual survey.

The figures reflect service-station sales only, and do not express total market sales. The survey indicates the number of gallons of motor oil sold at stations per 100 gal. of gasoline. Put another way, a ratio of 0.24, for example, is equivalent to 1 gal. of motor oil for every 416.9 gal. of gasoline.

The latest survey figures are based on confidential reports from key companies marketing motor oil—not on total market sales. Ratios for each are weighted by gasoline volume.

Motor-Oil Ratios for Service Stations

Season	United States
Spring-summer 1981	0.25
Fall-winter 1980-81	0.25
Spring-summer 1980	0.24
Fall-winter 1979-80	0.26
Spring-summer 1979	0.25
Fall-winter 1978-79	0.24
Spring-summer 1978	0.30
Fall-winter 1977-78	0.26
Spring-summer 1977	0.30
Fall-winter 1976-77	0.28
Spring-summer 1976	0.30
Fall-winter 1975-76	0.25
Spring-summer 1975	0.30
Fall-winter 1974-75	0.26
Spring-summer 1974	0.29
Fall-winter 1973-74	0.32

The fall-winter season covers the period Oct. 1-March 31. Spring-summer covers the period April 1-Sept. 30.

Over-All and Station-Only Ratios (a)

Season	Over-all	Station Only
Spring-summer 1981	0.24	0.28
Fall-winter 1980-81	0.24	0.28
Spring-summer 1980	0.24	0.28
Fall-winter 1979-80	0.24	0.24
Spring-summer 1979	0.29	0.24
Fall-winter 1978-79	0.28	0.23
Spring-summer 1978	0.32	0.29
Fall-winter 1977-78	0.31	0.26
Spring-summer 1977	0.31	0.31
Fall-winter 1976-77	0.32	0.30
Spring-summer 1976	0.30	0.25
Fall-winter 1975-76	0.30	0.25
Spring-summer 1975	0.30	0.29
Fall-winter 1974-75	0.31	0.26
Spring-summer 1974	0.33	0.29
Fall-winter 1973-74	0.38	0.33

(a) Station-only ratios in this table include only companies also reported ratios through all retail outlets, such as stations, garages, car dealers, chain stores.

Service-Station Sales Projection

Season	Avg. qt. per car service-station sales	Avg. mi. per car per season	Avg. gal. 'gas' per car per season	Avg. qt. refill per car-station sales	Avg. qt makeup per car-station sales	Avg. no. per car station oil chgs.	Avg. mi. interval station sale of oil chg.	Gal. gasoline sold per gal. oil
Spring-summer 1981								
Fall-winter 1980-81								
Spring-summer 1980	3.42	5,329	357.3	2.39	1.03	0.53	10,155	416.9
Fall-winter 1979-80	3.04	4,398	293.2	2.13	0.91	0.45	9,817	384.8
Spring-summer 1979	3.09	5,602	309.0	2.16	0.93	0.45	12,339	400.2
Fall-winter 1978-79	3.06	4,584	318.3	2.14	0.92	0.45	10,187	416.6
Spring-summer 1978	4.48	5,491	373.5	3.13	1.35	0.66	8,345	333.4
Fall-winter 1977-78	3.17	4,493	305.6	2.22	0.95	0.47	9,620	396.5
Spring-summer 1977	4.22	5,563	352.0	2.95	1.27	0.62	8,958	333.3
Fall-winter 1976-77	3.27	4,551	291.7	2.29	0.98	0.48	9,441	357.0
Spring-summer 1976	4.57	5,225	381.4	3.20	1.37	0.67	7,786	342.1
Fall-winter 1975-76	3.12	4,275	312.0	2.18	0.94	0.46	9,334	400.0
Spring-summer 1975	4.66	5,170	388.7	3.26	1.40	0.69	7,536	334.4
Fall-winter 1974-75	3.32	4,230	320.4	2.33	0.90	0.49	8,633	384.6
Spring-summer 1974	4.72	5,601	408.8	3.30	1.42	0.69	8,071	346.4
Fall-winter 1973-74	4.32	4,583	339.5	3.02	1.30	0.63	7,206	313.9
Spring-summer 1981	3.84	5,024	331.6	2.69	1.15	0.57	8,814	334.6
Fall-winter 1980-81	2.93	4,111	271.2	2.05	0.88	0.43	9,560	370.1

Data reflect average selling patterns in service stations only, as projected from service-station oil-ratio data. Data do not reflect consumer-buying pattern. Source: NPN questionnaires.

Lube Oil Sales Projections

U.S. Demand for Automotive Lube Base Oils

	(Add 000,000)				
Year	Engine Oils	Hydraulic Fluids	Other Lubes	Total (gal.)	Total (bbl.)
1990	913	226	54	1,193	28.4
1985	928	214	52	1,194	28.4
1981	896	187	48	1,131	26.9
1980	912	190	47	1,149	27.4
1979	1,032	224	54	1,310	31.2
1978	981	220	52	1,253	29.8
1977	906	205	90	1,201	28.6
1976	884	200	88	1,172	27.9

Source: James L. Helm, Sun Refining and Marketing Co., in projection prepared for the Association of Petroleum Re-Refiners October, 1981 with adjustments to 1981 to reflect actuals.

U.S. Demand for Lubricating Base Oils

	(Add 000,000)			
Year	Total	Automotive Lubes	Industrial Lubes	Process Oils
1990	60.3	28.4	21.2	10.7
1985	58.2	28.4	20.6	9.2
1981	52.8	26.9	18.2	7.7
1980	54.4	27.4	19.0	8.0
1979	61.4	31.2	21.4	8.8
1978	58.8	29.8	20.6	8.4
1977	57.1	28.6	21.1	7.4
1976	55.3	26.2	20.5	8.6

Source: James L. Helm, Sun Refining and Marketing Co., in projection prepared for the Association of Petroleum Re-Refiners October 1981 with adjustments to 1981 to reflect actuals.

Projected Domestic Demand for Blended Lubricants

	(Millions of gal.)			
Automotive Lubes	1980	1981	1985	1990
On-Road Engine Oil	825	804	805	780
Off-Road Engine Oil	234	233	265	300
Hydraulic Oil	214	210	240	255
Gear Oil	52	53	57	60
Totals	**1,325**	**1,300**	**1,367**	**1,395**

	(Millions of gal.)			
Industrial Lubes	1980	1981	1985	1990
General Lubes	486	463	525	550
Metalworking	211	199	220	225
Engine Oil	150	139	160	170
Process Oil	332	338	388	450
Totals	**1,179**	**1,139**	**1,293**	**1,395**

Source: James L. Helm, Sun Refining and Marketing Co., projection prepared for the Association of Petroleum Re-Refiners October 1981 with adjustments to 1981 to reflect actuals.

Automotive Sales

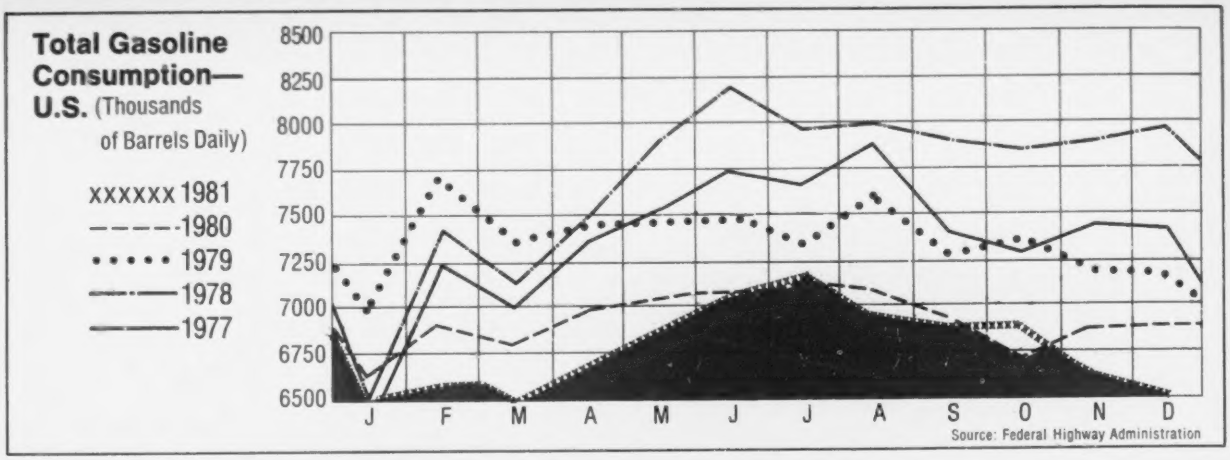
	(Add 000 gal.)	
	1980	1979
SAE J-183a, Engine Oils		
Monograded	522,212	616,026
Multi-graded	479,560	484,570
Sub Total	**1,001,772**	**1,100,596**
Non SAE J-183a, Engine Oils		
Aircraft	11,324	12,160
Gasoline fueled two-stroke	13,105	16,420
Sub Total	**24,429**	**28,580**
Transmission and Hydraulic Fluids		
Automatic Trans. Fluids	133,473	141,784
Universal Tractor Fluids	41,916	43,653
Shock Absorber/Steering Fluid	7,750	10,635
Other (Manual Trans., etc.)	7,001	11,289
Sub Total	**190,140**	**207,361**
Gear Lubricants		
GL-4 Less	5,983	8,721
GL-5 and GL-6	42,892	46,160
Sub Total	**48,875**	**54,881**
Total Automotive Sales	**1,265,216**	**1,391,418**

Industrial Sales

	(Add 000 gal.)	
	1980	1979
General Industrial Lubricants		
Hydraulic Oils	214,055	231,832
Gear Oils	41,099	45,225
Other Specified	162,523	179,669
Other Unspecified	2,134	829
Sub Total	**419,811**	**457,555**
Industrial Engine Oil		
Railroad Diesel	61,271	69,990
Marine	54,560	36,471
Natural Gas	41,209	39,923
Sub Total	**157,040**	**146,384**
Metalworking		
Specified	86,973	103,517
Unspecified	3,828	1,648
Sub Total	**90,801**	**105,165**
Process Oils		
Specified	284,780	334,420

	(Add 000 gal.)		
	1980	1979	1978
Total Industrial Lube Sales	**952,432**	**1,043,524**	**1,002,169**
Total Automotive Lube Sales	**1,265,216**	**1,391,418**	**1,385,184**
GRAND TOTAL	**2,217,648**	**2,434,942**	**2,387,353**

Source for Table: James L. Helm, Sun Refining and Marketing Co. and the U.S. Lubricating Oil Sales Report, National Petroleum Refiners Assn.



Total Gasoline Consumption— U.S. (Thousands of Barrels Daily)

Source: Federal Highway Administration

Gasoline Consumption by States

(Includes consumption on highway, off-highway and other uses.)

	1981 Rank	(Add 000 gal.) 1981 (a)	(Add 000 gal.) 1980 (b)	% Chng. '81 vs. '80
Alabama	23	1,849,225	1,961,902	−5.7%
Alaska	50	212,804	201,373	5.7
Arizona	28	1,344,438	1,328,722	1.2
Arkansas	33	1,137,999	1,178,800	−3.5
California	1	10,842,862	10,992,050	−1.4
Colorado	26	1,503,658	1,506,415	−0.2
Connecticut	29	1,296,048	1,327,582	−2.4
Delaware	48	290,581	293,851	−1.1
District of Columbia	51	177,658	171,451	0.7
Florida	4	4,845,057	4,810,520	0.7
Georgia	11	2,809,969	2,874,923	−2.3
Hawaii	47	347,848	354,529	−1.9
Idaho	40	471,054	488,333	−3.5
Illinois	6	4,598,012	4,816,780	−4.5
Indiana	12	2,605,584	2,686,146	−3.0
Iowa	27	1,474,733	1,561,192	−5.5
Kansas	31	1,268,708	1,311,181	−3.2
Kentucky	24	1,729,135	1,755,397	−1.5
Louisiana	18	2,006,034	2,081,328	−3.6
Maine	39	497,749	517,014	−3.7
Maryland	21	1,914,423	1,941,209	−1.1
Massachusetts	16	2,249,956	2,301,675	−2.2
Michigan	8	4,014,363	4,274,036	−6.1
Minnesota	19	1,984,982	2,045,270	−2.9
Mississippi	32	1,208,384	1,194,845	1.1
Missouri	14	2,528,616	2,602,627	−2.8
Montana	41	445,641	459,950	−3.1
Nebraska	35	798,018	847,341	−5.8
Nevada	38	508,535	500,286	1.6
New Hampshire	46	358,962	411,214	−3.0
New Jersey	9	3,150,798	3,260,992	−3.4
New Mexico	37	742,486	743,334	−0.1
New York	3	5,674,946	5,668,563	0.1
North Carolina	10	2,874,700	2,932,274	−2.0
North Dakota	43	408,449	407,250	0.3
Ohio	5	4,766,658	4,982,574	−4.3
Oklahoma	20	1,922,403	1,845,259	4.2
Oregon	30	1,271,001	1,330,612	−4.5
Pennsylvania	7	4,471,326	4,735,849	−5.6
Rhode Island	45	368,524	381,826	−3.5
South Carolina	25	1,529,196	1,562,400	−2.1
South Dakota	42	411,024	423,517	−2.9
Tennessee	15	2,388,466	2,417,939	−1.2
Texas	2	8,149,406	8,106,499	0.5
Utah	36	768,450	734,992	4.6
Vermont	49	234,114	238,842	−2.0
Virginia	13	2,530,673	2,599,199	−2.6
Washington	22	1,872,364	1,882,513	−0.5
West Virginia	34	804,632	845,242	−4.8
Wisconsin	17	2,067,800	2,177,363	−5.0
Wyoming	44	375,068	373,723	0.3
U.S. Total		**104,143,151**	**106,448,704**	**−2.2%**

Includes consumption on highway, off-highway and other uses.
(a) Preliminary; (b) Revised and final.

. . . and by Types of Vehicles

	Passenger Vehicles						
		Buses					
	Cars and Motorcycles	Commercial	School	All Buses	Total Passenger	Trucks and Combinations	All Motor Vehicles
Fuel consumed (million gal.)	73,735 (a)	696,000	379,600	1,075,600	74,810,354	40,149,500	114,959,854
Average per vehicle (gal.)	579 (b)	6,516	994	2,034	585	1,154	711
Average miles per gal.	15.32 (c)	5.03	7.64	5.95	15.19	9.58	13.23
Vehicles registered (thousands)	127,488 (d)	106.8	381.9	528.8	127,977	33,637	161,614
Average miles travelled	8,865 (e)	32,765	7,592	12,103	8,879	11,433	9,410
Vehicle miles travelled (millions):							
Main rural roads	390,081	1,175	1,425	2,600	392,681	197,270	589,951
Local rural roads	69,125	90	610	700	69,825	13,950	83,775
Urban streets	670,681	2,235	865	3,100	673,781	173,350	847,131
Total travel 1980	**1,129,887 (f)**	**3,500**	**2,900**	**6,400**	**1,136,287**	**384,570**	**1,520,857**
Total travel 1979	**1,162,528 (g)**	**3,125**	**2,980**	**6,105**	**1,168,663**	**360,500**	**1,529,133**

(a) 73,374,754,000 for passenger cars, 360,000,000 for motorcycles; (b) 603 for passenger cars, 63 for motorcycles; (c) 15.15 for passenger cars, 50.00 for motorcycles; (d) 121,723,650,000 for passenger cars, 5,724,602,000 for motorcycles; (e) 9,135 for passenger cars, 3,144 for motorcycles; (f) 1,111,887,000 for passenger cars, 18,000,000 for motorcycles; (g) 1,140,518,000 for passenger cars, 22,010,000 for motorcycles.

Source: Federal Highway Administration, Table VM-1, October 1981.

State Gasoline Consumption by Rank

	1981 Rank	1980 Rank	(Add 000 gal.) 1981 Total
California	1	1	10,842,862
Texas	2	2	8,149,406
New York	3	3	5,674,946
Florida	4	5	4,845,057
Ohio	5	4	4,766,658
Illinois	6	6	4,598,012
Pennsylvania	7	7	4,471,326
Michigan	8	8	4,014,363
New Jersey	9	9	3,150,798
North Carolina	10	10	2,874,700
Georgia	11	11	2,809,969
Indiana	12	12	2,605,584
Virginia	13	14	2,530,673
Missouri	14	13	2,528,616
Tennessee	15	15	2,388,466
Massachusetts	16	16	2,249,956
Wisconsin	17	17	2,067,300
Louisiana	18	18	2,006,034
Minnesota	19	19	1,984,982
Oklahoma	20	23	1,922,403
Maryland	21	21	1,914,423
Washington	22	22	1,872,364
Alabama	23	20	1,849,225
Kentucky	24	24	1,729,135
South Carolina	25	26	1,529,196
Colorado	26	27	1,503,658

Source: Federal Highway Administration

	1981 Rank	1980 Rank	(Add 000 gal.) 1981 Total
Iowa	27	25	1,474,733
Arizona	28	29	1,344,438
Connecticut	29	30	1,296,048
Oregon	30	28	1,271,001
Kansas	31	31	1,268,708
Mississippi	32	32	1,208,384
Arkansas	33	33	1,137,998
West Virginia	34	34	804,632
Nebraska	35	35	798,018
Utah	36	37	768,450
New Mexico	37	36	742,486
Nevada	38	39	508,535
Maine	39	38	497,794
Idaho	40	41	471,054
Montana	41	40	445,641
South Dakota	42	42	411,024
North Dakota	43	44	408,449
Wyoming	44	46	375,068
Rhode Island	45	45	368,504
New Hampshire	46	43	358,962
Hawaii	47	47	347,848
Delaware	48	48	290,581
Vermont	49	49	234,114
Alaska	50	50	212,804
District of Columbia	51	51	177,658

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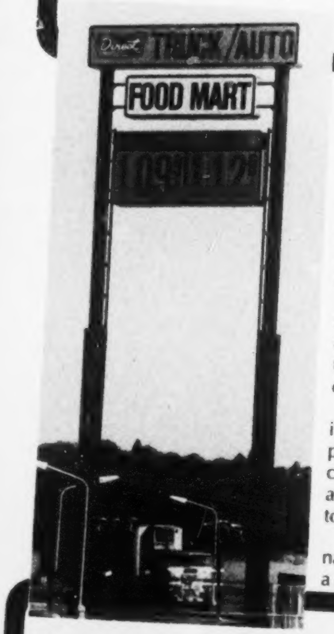

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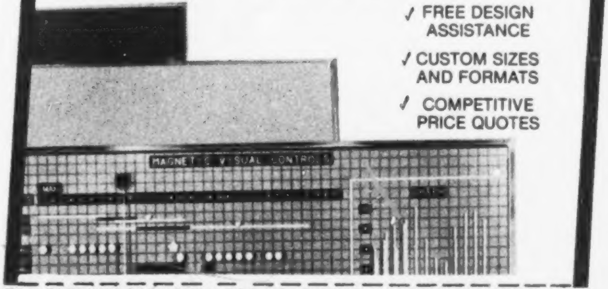

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Gasoline Octanes, U.S. Service Stations

The octane numbers of leaded and unleaded gasolines were fairly stable in the fall-winter of 1980-81 and the summer of 1981, according to the latest evaluation report from the U.S. Department of Energy's Technology Center in Bartlesville, Okla. The 1981 study included a change that paralleled the introduction of above 90 and below 90 indexes for unleaded gasoline in 1980. The new concept is now applied to leaded gasoline with a below 93 index and an above 93 index. The data for the above 93 index were not available when the 1981 report was published.

		Regular grade (x)			Premium grade (x)			Unleaded grade		
				(R + M)*			(R + M)*			(R + M)*
Year	Season	Rsh.	Mtr.	2	Rsh.	Mtr.	2	Rsh.	Mtr.	2
1981	Summer	92.8(x)	85.1(x)	89.0(x)	—	—	—	91.9(a) 96.3(b)	83.0(a) 86.2(b)	87.4(a) 91.3(b)
1980-81	Winter	92.8	85.4	89.1	97.3	89.2	93.3	91.9(a) 96.1(b)	83.3(a) 86.5(b)	87.6(a) 91.4(b)
1980	Summer	96.2	85.2	88.9	97.0	88.6	92.8	92.1(a) 96.1(b)	83.4(a) 86.4(b)	87.8(a) 91.6(b)
1979-80	Winter	92.5	85.5	89.0	97.2	89.3	93.2	92.1(a) 97.1(b)	83.7(a) 87.0(b)	87.9(a) 92.1(b)
1979	Summer	92.8	85.7	89.3	97.6	89.8	93.7	93.0	84.1	88.6
1978-79	Winter	93.2	85.9	89.6	98.0	90.3	94.2	93.1	84.3	88.7
1978	Summer	93.2	85.7	89.5	98.2	90.4	94.3	93.0	83.9	88.5
1977-78	Winter	93.2	85.7	89.5	98.8	91.0	94.9	92.9	83.9	88.4
1977	Summer	93.2	85.9	89.6	98.7	91.2	95.0	92.9	83.9	88.5
1976-77	Winter	93.2	86.1	89.7	98.8	91.4	95.1	92.6	84.1	88.4
1976	Summer	93.3	86.0	89.6	98.9	91.4	95.2	92.4	83.9	88.2
1975-76	Winter	93.4	86.0	89.7	98.9	91.4	95.2	92.3	84.0	88.2
1975	Summer	93.4	86.0	89.7	98.9	91.4	95.2	92.1	83.9	88.0
1974-75	Winter	93.4	86.1	89.9	98.9	91.6	95.3	92.3	84.0	88.2
1974	Summer	93.4	85.9	89.7	98.9	91.5	95.2			
1973-74	Winter	93.4	86.0	89.7	99.1	91.7	95.4			
1973	Summer	93.5	86.1	89.8	99.3	91.9	95.6			
1972-73	Winter	93.9	86.4	90.2	99.6	92.2	95.9			
1972	Summer	94.1	86.4	99.8	90.3	92.2	96.0			

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*Antiknock index.
(x) In 1981, DOE began two classifications for leaded gasoline—Below 93 octane and above 93 octane. The data on above 93 octane were not available when the latest study was completed.
(a) Unleaded antiknock (octane) index data below 90.
(b) Unleaded antiknock (octane) index data 90 and above.
Source: Motor Gasolines, Summer 1981, Bartlesville (Okla.) Energy Technology Center Department of Energy, May, 1982.

Octane Numbers Dip Slightly

Minor slippage in the octane numbers of leaded and unleaded gasolines are shown in the winter 1980-81 and the summer 1981 evaluation reports published by the Department of Energy, Bartlesville, Okla., Technology Center. As noted above, the government introduced a new concept for leaded gasolines in 1981, a below 93 index and an above 93 index. Only the data for the below 93 index were available in May of this year, however. The government uses two methods to determine octane numbers—research and motor. These are combined and divided by two (R plus M divided by 2) to reach the number that is posted on service station pumps.

	Unleaded Octane Number						Leaded Octane Number (x)					
	Index Below 90			Index Above 90			Index Below 93			Index Above 93		
			(R + M)			(R + M)			(R + M)			(R + M)
	Rsch.	Mtr.	2	Rsch.	Mtr.	2	Rsch.	Mtr.	2	Rsch.	Mtr.	2
Northeast	91.5	83.3	87.4	NS	NS	NS	94.0	84.7	89.4	—	—	—
Mid-Atlantic Coast	92.1	82.9	87.5	96.8	86.7	91.8	93.4	85.8	89.6	—	—	—
Southeast	91.7	82.6	87.1	97.1	86.7	91.9	93.2	85.4	89.3	—	—	—
Appalachian	91.8	83.2	87.5	95.5	86.4	91.0	93.0	85.7	89.4	—	—	—
Michigan	91.6	82.7	87.2	96.0	86.1	91.1	92.2	85.4	88.8	—	—	—
North Illinois	91.6	83.3	87.5	96.3	87.3	91.8	92.9	85.8	89.3	—	—	—
Central Mississippi	91.9	82.4	87.2	95.6	86.7	91.2	93.0	85.5	89.3	—	—	—
Lower Mississippi	92.0	82.9	87.5	96.2	86.1	91.2	92.7	85.1	88.9	—	—	—
North Plains	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—
Central Plains	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—
South Plains	92.1	83.5	87.8	95.9	84.4	90.2	92.4	84.4	88.4	—	—	—
South Texas	92.0	82.9	87.5	96.7	86.2	91.5	93.6	85.1	89.4	—	—	—
South Mountain States .	91.3	82.3	86.8	96.5	86.0	91.3	92.3	84.7	88.5	—	—	—
North Mountain States .	91.2	82.7	86.9	NS	NS	NS	90.8	84.4	87.6	—	—	—
Pacific Northwest	92.3	83.3	87.9	96.0	86.5	91.2	92.3	85.2	88.8	—	—	—
North California	92.4	83.4	87.9	96.6	86.2	91.4	93.1	85.3	89.2	—	—	—
South California	92.8	83.1	87.9	96.6	85.9	91.3	93.2	84.7	89.0	—	—	—
Average												
Summer 1981	**91.9**	**83.0**	**87.4**	**96.3**	**86.2**	**91.3**	**92.8**	**85.1**	**89.0**	—	—	—
Summer 1980	**92.1**	**83.4**	**87.8**	**96.1**	**86.4**	**91.6**	**96.2**	**85.2**	**88.9**	(a)	(a)	(a)

(X) In 1981, DOE began two classifications for leaded gasoline—Below 93 octane and Above 93 octane. The data on above 93 octane were not available when this latest study was completed and published.
NS—No samples; (a) Comparable data for 1980 not available. See (X) above.
Source: Bartlesville (Okla.) Energy Technology Center, Department of Energy, Motor Gasolines, Summer, 1981, May, 1982.

Diesel Sales for Highway Use

Diesel fuel sales for motor vehicles slumped in 1980—not much, but enough to be heard. Diesel sales totaled 323.4-million bbl. in 1981 versus 327.4-million bbl. in 1979. Off-highway sales of diesel—primarily for farm and construction use—also declined in 1980. Sales in 1980 amounted to 45-million bbl. versus 63-million bbl. in 1979. Percentage wise, the off-highway decline was more impressive, however—29%. Because the government changed its format for collecting fuel oil data, the figures below cannot be compared with prior years.

(Add 000 bbl.)

Region	State	On-Highway 1980	On-Highway 1979	% Change	Off-Highway 1980	Off-Highway 1979	% Change
New England	Connecticut	2,446	2,426	0.8%	422	206	-104.9%
	Maine	1,349	1,384	-2.5	183	293	-37.5
	Massachusetts	4,346	4,291	1.3	250	470	-45.8
	New Hampshire	656	645	1.7	99	87	13.8
	Rhode Island	638	544	17.3	37	43	-14.0
	Vermont	699	736	-5.0	191	338	-43.5
	Total	**10,134**	**10,026**	**1.0**	**1,182**	**1,437**	**-17.7**
Mid-Atlantic	New Jersey	8,066	7,062	14.2	665	802	-17.1
	New York	7,814	8,074	-3.2	1,054	1,249	-15.6
	Pennsylvania	16,555	15,311	8.1	2,564	3,939	-34.9
	Total	**32,435**	**30,447**	**6.5**	**4,283**	**5,990**	**-28.5**
South Atlantic	Delaware	825	654	26.1	167	79	111.4
	Dist. of Columbia	406	428	-5.1	13	28	-53.6
	Florida	11,704	10,085	16.0	1,082	586	84.6
	Georgia	10,554	10,611	0.5	386	218	77.1
	Maryland	3,891	3,524	10.4	658	735	-10.5
	North Carolina	8,987	9,240	-2.7	494	552	-10.5
	South Carolina	5,372	5,485	-2.0	265	282	-6.0
	Virginia	7,466	6,404	16.6	843	939	-10.2
	West Virginia	2,904	1,836	59.2	1,069	1,138	-6.1
	Total	**52,109**	**48,267**	**8.0**	**4,977**	**4,557**	**-9.2**
North East Central	Illinois	14,308	16,828	-15.0	1,281	1,699	-24.6
	Indiana	13,551	12,953	4.6	617	457	35.0
	Michigan	7,140	8,816	-19.0	652	1,294	-49.6
	Ohio	16,604	16,935	-2.0	2,593	6,522	-602.4
	Wisconsin	7,153	7,618	-6.1	569	610	-6.7
	Total	**58,756**	**63,150**	**-7.0**	**5,712**	**10,582**	**-460.2**
North West Central	Iowa	6,312	6,957	-9.3	312	565	-44.8
	Kansas	5,449	5,511	-1.1	502	1,892	-73.5
	Minnesota	5,936	7,212	-17.7	727	813	-10.6
	Missouri	8,430	8,916	-5.5	923	1,149	-19.7
	Nebraska	3,426	3,434	-0.2	272	217	25.3
	North Dakota	1,849	1,939	-4.6	153	229	-33.2
	South Dakota	1,708	1,882	-1.8	129	384	-66.4
	Total	**33,110**	**35,851**	**-7.6**	**3,018**	**5,249**	**-45.2**
East South Central	Alabama	7,570	6,731	12.5	676	731	-7.5
	Kentucky	5,890	5,553	5.7	3,320	2,015	64.8
	Mississippi	4,824	4,443	8.6	789	1,898	-58.4
	Tennessee	9,080	9,631	-5.7	601	1,243	-51.6
	Total	**27,364**	**26,358**	**3.8**	**5,386**	**5,887**	**-8.5**
South West Central	Arkansas	4,942	5,096	-3.0	1,411	1,894	-25.5
	Louisiana	6,756	6,819	-0.9	1,163	1,768	-34.2
	Oklahoma	7,144	7,369	-3.1	1,133	4,126	-725.4
	Texas	28,170	29,662	-5.0	4,394	6,947	-36.7
	Total	**47,012**	**48,946**	**-4.0**	**8,101**	**14,735**	**-45.0**
Rockies	Arizona	5,137	5,328	-3.6	737	675	-9.2
	Colorado	3,358	3,603	-6.8	962	730	31.8
	Idaho	1,293	1,932	-33.1	474	363	30.6
	Montana	2,315	2,535	-8.7	441	517	-14.7
	Nevada	1,833	1,590	15.3	194	324	-40.1
	New Mexico	3,939	3,757	4.8	1,149	2,203	-47.8
	Utah	2,609	2,623	-0.5	707	1,045	-32.3
	Wyoming	2,206	2,202	—	1,921	2,153	-10.8
	Total	**22,690**	**23,570**	**-3.7**	**6,585**	**8,010**	**-17.8**
Pacific Coast	Alaska	1,079	284	279.9	187	435	-57.0
	California	27,083	28,574	-5.2	2,702	3,905	-30.8
	Hawaii	428	399	7.3	237	182	30.2
	Oregon	5,714	5,618	1.7	1,496	943	58.6
	Washington	5,517	5,952	-7.3	1,159	1,280	-9.5
	Total	**39,821**	**40,827**	**-2.5**	**5,781**	**6,745**	**-15.2**
	U.S. Totals	**323,431**	**327,442**	**-1.2%**	**45,025**	**63,102**	**-28.6%**

Source: Energy Data Reports Sales of Fuel Oil and Kerosene in 1980, issued February, 1982.

Wholesale Price Trends Through 1981

Year	Refinery products in eight refinery markets representing total U.S.						Crude	
	Motor gasoline $ gal.	Kero-sine $ gal.	Light fuel ¢ gal.	Heavy fuel ¢ gal.	Average 4 products		8 areas $/bbl.	Products vs. crude $/bbl.
					¢ gal.	$/bbl.		
1981 (a)	$101.63	$100.03	97.20¢	61.17¢	88.66¢	$37.29	$31.845	$5.45
1980	87.40	80.26	78.21	44.43	72.77	30.57	21.190	9.38
1979	56.84	56.50	54.47	33.63	49.50	20.79	12.640	8.15
1978	39.22	37.23	35.66	23.00	33.72	14.16	9.000	5.16
1977	36.99	35.81	34.41	25.87	32.21	13.95	8.570	5.38
1976	33.82	31.67	30.38	21.66	29.55	12.41	8.141	4.26
1975	30.27	27.41	26.09	22.03	27.03	11.35	7.560	3.79
1974	25.53	24.02	22.57	20.43	23.48	9.36	6.739	2.621
1973	14.72	14.08	12.61	8.45	12.49	5.25	3.885	1.365
1972	12.70	12.87	10.61	7.60	10.87	4.57	3.388	1.182
1971	12.70	12.90	10.75	7.76	10.94	4.59	3.385	1.205
1970	12.33	12.43	10.45	6.14	10.20	4.28	3.177	1.103
1965	11.52	11.28	9.04	4.81	9.12	3.83	2.864	0.966
1960	11.61	11.17	8.79	4.88	9.15	3.84	2.882	0.958

(a) Preliminary

Source: Independent Petroleum Assn. of America. Product figures reflect trends in prices but not the actual sales realizations for producers or refiners.

AvGas, LPG and Natural-Gas Prices

	Aviation (¢ per gal. excluding taxes)							
	Av. Gasoline		Naphtha-type (a)	Kerosine-type		Wholesale		Natural Gas ¢ per MCF for Residential Heating
	Wholesale (b)	Retail (b)	Retail (b)	Wholesale (b)	Retail (b)	Propane	Butane	
1981								
January	118.9¢	121.6¢	99.2¢	97.1¢	95.7¢	46.5¢	66.1¢	406.9¢
February	121.3	128.1	102.7	103.6	101.6	48.2	63.0	409.3
March	127.2	131.1	106.9	104.8	106.3	48.3	62.1	417.4
April	117.5	131.3	109.0	103.8	106.4	49.3	60.1	421.7
May	120.7	133.5	109.1	104.4	106.2	48.6	56.8	457.1
June	116.5	132.1	107.6	102.3	104.8	46.0	52.7	457.6
July	120.1	133.4	106.3	100.5	103.8	46.0	56.5	460.4
August	120.0	132.5	105.7	101.4	103.3	47.2	60.6	466.6
September	121.0	133.5	105.6	103.0	103.3	47.7	64.6	486.3
October	117.2	134.5	104.8	99.9	101.1	47.3	64.7	487.4
November	114.4	133.2	104.6	101.9	102.6	45.5	61.6	473.8
December	116.8	131.9	103.8	101.9	102.6	45.5	55.4	471.1
1980								
January	90.8	90.0	76.0	83.4	77.0	41.8	73.3	354.9
February	98.5	97.8	80.1	86.2	83.0	42.7	70.1	357.9
March	102.9	107.0	84.1	86.6	86.3	41.0	66.8	368.1
April	104.8	109.6	83.2	88.4	87.4	41.2	63.1	367.8
May	106.2	109.7	89.1	89.0	87.6	41.7	63.7	393.9
June	107.7	111.4	90.0	86.1	88.6	41.2	58.2	394.8
July	109.3	113.4	91.4	88.3	89.7	40.8	53.8	410.6
August	110.2	112.9	90.6	86.2	90.7	40.6	53.1	413.1
September	110.8	113.3	92.9	86.4	88.8	41.4	51.2	417.0
October	110.8	113.0	91.1	87.8	88.6	43.2	54.3	420.6
November	112.4	113.0	92.5	89.9	90.0	45.1	65.5	396.1
December	115.1	117.0	96.4	91.5	91.5	46.6	68.9	403.3
Average 1981	**118.8**	**131.5**	**105.7**	**102.0**	**103.1**	**47.2**	**60.4**	**451.3**
1980	107.2	109.4	88.2	87.5	87.4	42.6	61.8	391.5
1979	68.5	69.5	52.3	66.5	55.1	29.5	45.8	323.1
1978	51.0	52.1	37.5	38.9	38.9	24.0	23.0	262.6
1977	46.7	47.7	35.0	36.7	35.8	25.0	24.0	226.4
1976	42.4	43.1	31.5	32.5	31.2	20.6	21.9	184.6
1975	—	—	—	—	—	—	—	154.2
1974	—	—	—	—	—	—	—	125.3
1973	—	—	—	—	—	—	—	108.2

(a) Nearly all naphtha-type fuels are sold directly to Defense Fuel Supply Center; hence, wholesale prices are not applicable; (b) Wholesale refers to the price of aviation fuel sold to other refiners and resellers, including bulk plants, branded and unbranded jobbers, and aviation-fuel distributors; retail refers to the price of aviation fuel sold to ultimate consumers, including commercial airline and military accounts. (c) Wholesale refers to the price at which refiners, resellers, and gas plants sell to one another, including sales to agricultural and industrial accounts but excludes butane/propane mixtures.

Source: Department of Energy, Monthly Energy Review, March 1982.

Gasoline Prices by Grades and Months (a)

(U.S. averages, retail, including taxes, in ¢ per gal.)

		Leaded Regular	Unleaded Regular	Leaded Premium	Average for All Types
1981	January	123.8¢	129.8¢	133.8¢	126.9¢
	February	132.1	138.2	141.0	135.3
	March	135.2	141.7	144.9	138.8
	April	134.4	141.2	145.1	138.1
	May	133.3	140.0	144.7	137.0
	June	132.4	139.1	144.6	136.2
	July	131.5	138.2	144.6	135.3
	August	131.0	137.6	144.4	134.8
	September	130.5	137.6	145.6	135.8
	October	129.9	137.1	145.7	135.3
	November	129.7	136.9	146.2	135.1
	December	129.3	136.5	146.0	134.8
	Average	**131.1**	**137.8**	**143.9**	**135.3**
1980	January	108.6	113.1	114.9	111.0
	February	115.9	120.7	123.3	118.6
	March	120.2	125.2	127.7	123.0
	April	121.2	126.4	129.2	124.2
	May	121.5	126.6	129.5	124.4
	June	121.7	126.9	130.0	124.6
	July	121.6	127.5	130.7	124.7
	August	121.0	126.7	131.0	124.3
	September	119.7	125.7	130.4	123.1
	October	118.8	125.0	130.1	122.3
	November	118.8	125.0	129.9	122.2
	December	119.7	125.8	131.0	123.1
	Average	**119.1**	**124.5**	**128.1**	**122.1**
Average	1979	85.7	90.3	92.2	88.2
	1978	62.6	67.0	69.4	65.2
	1977	62.2	65.6	67.4	NA
	1976	59.0	61.4	63.6	NA
	1975	56.7	NA	60.9	NA
	1974	53.2	NA	56.9	NA

(a) Department of Energy discontinued in 1980 its series breaking out full-service and self-service prices, see Factbook '81 for last reports of this type.
Source: Department of Energy, Monthly Energy Review, March 1982.

Distributor Diesel, Distillate and Resid Prices

	No. 2 Motor Fuel (¢ per gal. ex. taxes)		No. 2 Residential (¢ per gal.)			No. 6 ($ per bbl.) (a)	
	Wholesale	Retail	Purchase Price	Selling Price	Margin	Wholesale	Retail
1981							
January	92.5¢	100.9¢	98.6¢	114.4¢	15.1¢	$31.14	$33.65
February	99.5	106.1	106.0	123.4	16.1	31.81	36.04
March	101.7	108.8	106.3	125.5	17.6	31.78	36.11
April	101.3	107.7	105.2	123.9	17.7	30.56	34.70
May	100.8	106.8	104.0	122.7	17.6	30.41	34.11
June	99.5	106.6	103.0	120.9	16.9	25.95	31.03
July	98.8	103.8	102.7	121.0	17.1	26.52	30.57
August	97.8	105.9	102.2	119.4	16.2	27.01	30.52
September	97.6	104.8	101.6	119.7	17.2	26.20	30.33
October	97.4	105.3	101.1	118.8	16.6	26.78	30.32
November	98.4	105.2	102.3	120.8	17.6	27.99	30.16
December	98.3	105.1	102.6	122.0	18.3	27.28	30.85
Average	**98.5**	**106.0**	**102.6**	**120.5**	**16.8**	**28.87**	**32.49**
1980							
January	76.0	82.2	75.2	90.8	16.2	24.41	26.21
February	78.3	85.0	79.0	95.3	16.7	23.34	26.48
March	79.8	87.8	80.4	97.1	17.1	21.11	25.33
April	80.4	88.0	81.0	97.4	17.0	19.09	22.87
May	80.5	87.8	81.4	97.2	16.3	20.22	23.75
June	81.7	88.6	82.5	97.9	15.8	20.44	24.09
July	81.9	87.6	83.0	97.9	15.3	21.28	23.86
August	81.6	86.9	82.9	97.9	15.2	22.25	25.00
September	80.3	86.6	83.0	98.1	15.4	22.47	25.31
October	81.5	85.9	83.7	98.7	15.3	24.06	26.68
November	83.6	88.9	86.1	101.1	13.8	28.12	30.10
December	87.5	92.4	91.3	106.5	14.1	29.76	32.33
Average	**81.2**	**87.3**	**82.2**	**97.8**	**15.8**	**23.14**	**26.09**
Average 1979	58.2	62.4	52.8	65.4	12.8	17.66	18.67
1978	37.1	40.2	38.5	49.2	10.9	11.51	12.77
1977	36.1	39.3	36.9	46.0	9.6	12.01	13.22
1976	31.9	34.7	32.6	40.6	8.8	10.60	11.46
1975	—	—	31.2	37.7	7.4	10.44	11.65

(a) This is an average for all sulfur levels of No. 2; 1% sulfur is fairly close to the average used here. Less than 1% is more expensive, more than 1¢ less costly; (b) Wholesale refers to the price of diesel fuel sold to other refiners and resellers, including branded jobbers, unbranded jobbers, and commercial accounts. Retail refers to the price at which company-owned and operated retail dealers sell to customers.
Source: Department of Energy, Monthly Energy Report, March 1982.

Residential Heating Oil Prices by Region

(¢ per gal.)

	Standard Federal Regions (a)									
1981	1	2	3	4	5	6	7	8	9	10
January	116.2¢	117.1¢	113.2¢	114.0¢	110.4¢	(b)	106.3¢	108.6¢	(b)	107.5¢
February	125.8	126.6	123.0	124.4	117.8	(b)	114.2	113.1	(b)	113.7
March	127.6	128.4	125.0	125.3	119.3	(b)	115.4	119.3	111.5¢	116.5
April	126.8	126.6	122.7	124.8	118.3	(b)	114.7	118.4	(b)	117.5
May	125.5	125.6	122.1	118.8	117.3	(b)	114.5	115.1	114.1	115.6
June	124.1	123.6	121.1	115.9	116.5	(b)	112.5	116.0	(b)	117.1
July	123.3	122.9	120.6	120.2	116.0	(b)	115.9	116.2	(b)	118.3
August	122.7	122.2	117.9	117.4	115.1	(b)	112.1	116.9	(b)	117.7
September	122.7	121.4	118.5	120.5	116.2	(b)	111.6	116.8	(b)	117.6
October	122.5	122.0	115.3	117.6	116.3	(b)	112.0	115.8	(b)	118.2
November	123.3	123.2	119.5	118.2	116.7	(b)	114.1	115.8	(b)	118.8
December	124.8	124.7	12[illegible].7	119.0	117.4	(b)	112.4	117.1	(b)	120.0
1980										
January	91.8	91.0	90.2	88.6	90.4	(b)	90.0	90.2	89.6	91.0
February	96.7	95.3	94.7	93.0	93.5	(b)	93.6	93.5	95.8	95.7
March	98.7	97.2	96.5	94.8	94.3	(b)	95.1	95.9	93.9	97.6
April	99.2	97.3	96.6	94.1	94.5	(b)	95.3	99.5	94.7	99.0
May	98.7	97.3	96.4	94.2	95.8	(b)	95.2	97.7	95.5	98.6
June	99.8	97.9	96.8	95.1	95.8	(b)	95.3	98.4	96.0	99.8
July	100.3	98.1	96.6	94.2	96.2	(b)	93.1	97.0	96.7	100.2
August	100.2	97.9	96.8	94.8	95.7	(b)	95.4	92.1	99.7	100.4
September	100.5	98.2	97.0	94.7	95.7	(b)	93.7	93.0	97.2	100.6
October	101.1	98.8	97.4	95.6	95.9	(b)	94.7	94.1	98.6	100.4
November	102.5	103.0	99.9	101.5	98.8	(b)	95.2	98.5	101.0	103.1
December	108.2	108.5	105.3	106.6	103.4	(b)	99.6	101.8	(b)	105.6

(a) Standard Federal Regions are as follows: 1. Me., N.H., Vt., Mass., Conn., R.I.; 2. N.Y., N.J., Puerto Rico and Virgin Islands; 3. Pa., Md., W. Va., Va., D.C., Del.; 4. Ky., Tenn., N.C., S.C., Miss., Ala., Ga., Fla., Canal Zone; 5. Minn., Wis., Mich., Ill., Ind., Ohio; 6. Tex., N.M., Okla., Ark., La.; 7. Kan., Mo., Iowa, Neb.; 8. Mont., N.D., S.D., Wyo., Utah, Colo.; 9. Calif., Nev., Ariz., Hawaii, Trust Terr. of Pacific Is., American Samoa, Guam; 10. Wash., Ore., Ida., Alaska; (b) Not available for publication because samples are too small

Source: Department of Energy, Monthly Energy Review, March, 1982.

Average No. 6 Residual Fuel Oil Prices

($ per bbl., excluding taxes)

	0.0% to 0.3% sulfur		0.31% to 1.0% sulfur		Greater than 1.0% sulfur		Average	
	Wholesale	Retail	Wholesale	Retail	Wholesale	Retail	Wholesale	Retail
1981								
January	$34.27	$37.23	$32.12	$33.96	$29.12	$31.35	$31.14	$33.65
February	38.04	41.60	34.96	37.32	28.96	32.02	31.81	36.04
March	37.78	41.19	34.47	38.01	29.55	31.95	31.78	36.11
April	35.66	41.71	33.10	35.94	28.35	30.56	30.56	34.70
May	33.61	41.09	32.53	35.94	28.77	30.64	30.41	34.11
June	28.01	38.30	26.71	32.38	25.33	27.16	25.95	31.03
July	29.56	39.02	27.38	31.93	25.62	25.96	26.52	30.57
August	30.48	36.57	27.77	32.04	26.03	26.20	27.01	30.52
September	29.91	39.17	27.46	32.08	24.80	26.26	26.20	30.33
October	30.26	39.90	28.64	31.88	24.96	26.18	26.78	30.32
November	31.71	39.48	29.63	31.02	26.09	26.45	28.03	30.16
December	30.88	37.65	28.04	32.09	25.51	26.53	27.28	30.85
Average	**32.85**	**39.31**	**30.58**	**33.69**	**27.09**	**28.57**	**28.87**	**32.49**
1980								
January	29.11	30.35	26.15	28.12	21.56	21.98	24.41	26.21
February	27.07	30.32	25.82	28.15	20.21	22.22	23.34	26.48
March	26.88	30.20	23.73	27.29	17.81	20.34	21.11	25.33
April	25.16	28.69	20.38	24.78	16.41	18.36	19.09	22.87
May	25.48	31.73	22.72	25.77	17.72	18.04	20.22	23.75
June	23.14	31.37	22.35	25.44	17.72	19.27	20.44	24.09
July	24.89	28.51	23.44	25.55	19.20	20.58	21.28	23.86
August	23.20	30.93	24.98	26.11	20.42	21.45	22.25	25.00
September	24.27	33.12	23.46	26.31	20.62	21.71	22.47	25.31
October	25.72	31.88	25.86	28.00	22.30	23.29	24.06	26.68
November	29.52	33.70	29.40	30.89	27.08	27.50	28.12	30.10
December	31.69	35.76	31.29	32.61	28.39	30.03	29.76	32.33
Average	**26.41**	**31.13**	**24.91**	**27.59**	**20.77**	**22.11**	**23.14**	**26.09**
Average 1979	19.87	21.21	18.33	19.33	15.89	16.44	17.66	18.67
1978	12.77	14.47	11.95	12.78	10.73	11.70	11.51	12.75
1977	13.45	14.36	12.09	13.45	11.31	12.27	11.96	13.23
1976	12.20	12.54	10.83	11.79	9.98	10.43	10.72	11.49

(a) Wholesale refers to the price of residual fuel sold to other refiners and resellers, including bulk plants, branded and unbranded jobbers, and other residual dealers. Retail refers to the price at which residual fuel oil is sold to ultimate consumers such as utility, industrial, commercial and residential accounts.

Source: Department of Energy, Monthly Energy Review, March 1982.

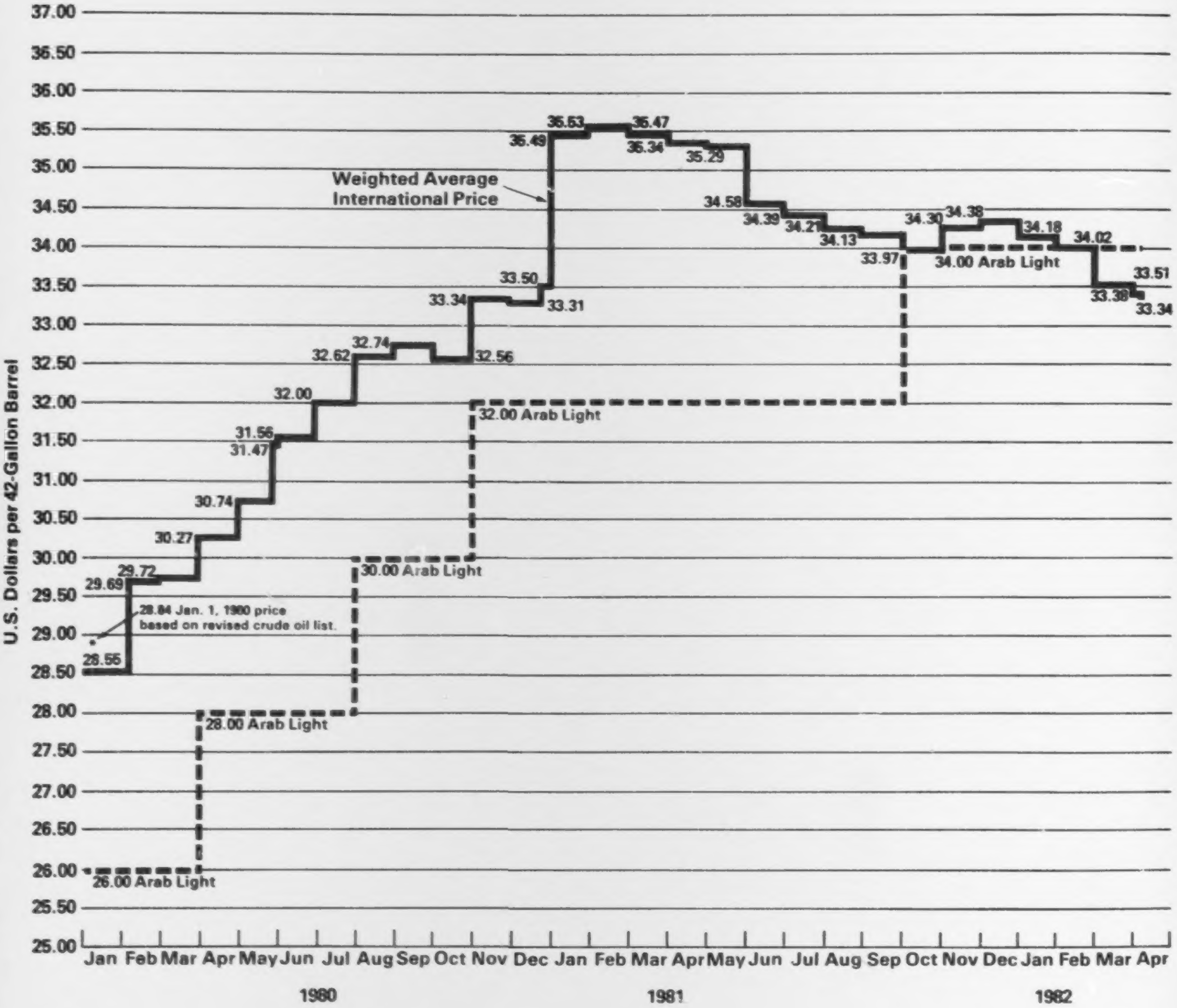
Spot Market Product Prices

($ per bbl.)

		Gasoline		Fuel Oil		Residual	
1982		Rotterdam (98 Octane)	New York (89 Octane)	Rotterdam (0.5% Sulfur)	New York (0.2% Sulfur)	Rotterdam (1% Sulfur)	New York (1% Sulfur)
Jan	8	$39.98	$39.67	$44.30	$40.42	$31.68	$28.40
	15	38.68	38.72	43.57	39.90	30.78	29.00
	22	38.57	38.93	40.88	39.38	29.50	28.35
	29	38.22	38.30	39.21	38.22	29.73	28.70
Feb	5	37.22	37.67	38.40	38.54	28.68	28.50
	12	37.22	37.61	37.87	37.90	27.93	29.25
	19	35.93	37.61	37.87	37.80	27.93	29.25
	26	35.52	35.72	37.00	37.38	28.08	28.50
Mar	5	35.46	34.88	35.32	35.28	28.08	28.00
	12	34.41	34.57	34.38	33.60	26.95	27.00
	19	32.42	34.55	34.99	34.02	26.50	27.00
	26	32.83	34.52	36.13	34.06	26.65	26.25
Apr	2	36.64	36.54	35.52	34.54	26.80	26.25
	9	36.17	38.01	35.72	36.12	27.78	27.70
	16	36.64	38.22	36.66	36.54	28.53	28.50
	23	37.51	39.69	37.87	38.22	28.75	28.75
1981							
Jan	2	43.67	42.01	40.35	40.32	35.66	34.25
	9	43.14	42.98	42.02	42.95	35.51	35.50
	16	43.20	42.46	42.49	42.74	36.26	37.00
	23	43.73	43.19	41.96	42.63	37.39	38.00
	30	42.91	43.94	41.62	42.63	37.76	37.25
Feb	6	43.38	44.31	41.62	43.47	37.09	37.25
	13	43.38	43.79	41.62	43.05	37.09	37.25
	20	41.91	43.18	41.15	42.21	36.64	36.25
	27	42.38	43.72	41.78	41.79	36.49	36.00
Mar	6	42.38	43.63	41.29	41.27	37.16	35.25
	13	42.03	42.58	41.35	40.74	37.16	34.75
	20	42.09	42.88	41.42	40.32	37.09	33.50
	27	41.38	42.76	41.08	39.48	35.74	32.90
Apr	3	41.79	42.08	40.75	39.48	35.66	32.50
	10	41.62	43.30	40.42	40.43	34.83	33.00
	17	41.91	42.46	38.94	40.21	34.68	32.75
	24	41.79	41.52	38.20	38.58	35.06	32.50
May	1	41.97	41.24	36.86	38.74	34.01	32.25
	8	41.79	41.58	36.39	38.74	32.66	31.00
	15	40.97	41.62	36.93	38.74	31.31	29.50
	22	40.04	42.08	36.60	38.96	31.23	28.25
	29	41.27	41.03	36.60	38.64	31.16	26.90
June	5	42.15	41.39	35.99	38.43	28.90	26.50
	12	42.15	41.64	36.13	37.80	27.33	25.50
	19	42.38	41.85	36.86	37.59	26.13	25.00
	26	43.85	42.27	37.53	38.22	26.13	27.75
July	3	44.96	42.42	37.53	38.22	25.98	27.00
	10	44.96	42.84	37.53	38.22	25.98	28.50
	17	46.37	43.22	39.75	39.06	28.98	28.50
	24	46.66	43.34	38.61	39.48	29.05	28.25
	31	46.72	42.97	38.40	39.35	28.90	27.75
Aug	7	45.37	43.05	39.07	39.48	28.68	28.00
	14	44.31	42.80	39.07	39.48	28.15	28.00
	21	43.90	42.80	39.68	39.90	28.53	28.60
	28	43.85	42.13	39.86	39.27	29.88	28.50
Sept	4	43.32	41.94	40.08	39.38	30.41	28.50
	11	43.73	41.87	39.68	39.06	30.41	28.15
	18	43.90	41.73	39.75	39.42	30.93	28.25
	25	43.90	41.83	39.68	39.48	31.01	28.80
Oct	2	43.73	41.83	40.62	40.00	30.86	29.25
	9	43.14	41.98	41.09	40.64	30.63	29.50
	16	44.67	41.87	42.09	41.03	30.03	29.85
	23	44.37	42.29	42.43	41.06	30.93	29.80
	30	44.26	42.40	42.83	41.48	30.41	29.25
Nov	6	44.20	42.71	43.23	41.69	30.48	29.75
	13	43.32	42.15	43.16	41.90	30.33	29.90
	20	42.79	41.54	43.70	41.90	29.65	29.90
	27	42.73	41.54	43.10	42.59	28.83	29.10
Dec	4	42.15	41.03	43.57	42.10	29.88	29.90
	11	41.03	39.61	42.83	41.16	30.41	29.00
	18	41.03	39.82	43.16	41.48	29.20	29.00
	24	40.50	39.50	44.57	41.48	29.50	29.00

World Crude Oil Prices (a)

(Dollars per bbl.)



(a) Internationally traded oil only. Average prices FOB weighted by estimated export volume.
Source: Department of Energy, Weekly Petroleum Status Report, April, 1982.

Landed Costs of Crude-Oil from Selected Countries (a)

	Algeria	Canada	Indonesia	Iran	Libya	Nigeria	Saudi Arabia	U.A. Emirates	Venezuela
1981 (b)	$40.49	$36.16	$37.57	(c)	$40.92	$39.70	$34.19	NA	$29.87
1980	37.90	30.47	33.92	(c)	37.72	30.05	30.02	NA	25.86
1979	21.90	20.43	20.69	$25.02	23.68	22.96	19.15	$21.90	18.18
1978	14.91	14.50	14.64	13.88	14.72	14.86	13.92	14.39	12.83
1977	15.20	14.21	14.63	13.80	14.87	15.25	13.61	14.04	13.13
1976	13.81	13.57	13.82	12.82	13.58	13.80	13.04	13.30	11.80
1975	12.72	12.72	13.79	12.21	12.35	12.62	12.30	12.87	11.65

(a) Does not include supplemental costs; (b) Preliminary estimates; (c) No crude has been imported from Iran since February, 1980.
Source: Department of Energy, Monthly Energy Review, March, 1982.

International Prices for Gasoline and Fuel Oil

(U.S. dollars per gal., except resid which is U.S. dollars per 42 gal. bbl.)

	1/1/81				7/31/80				7/31/79			
	Gasoline		Fuel Oil		Gasoline		Fuel Oil		Gasolines		Fuel Oil	
Country	Reg.	Prem.	Dist.	Resid.	Reg.	Prem.	Dist.	Resid.	Reg.	Prem.	Dist.	Resid.
WESTERN HEMISPHERE												
Argentina	$2.15	$2.63	$32.87	$25.45	$1.57	$1.89	NR	$17.32	114.0¢	137.0¢	56.0¢	$13.30
Bolivia	.76	.91	31.91	25.44	.76	.91	31.91	25.44	28.0	65.0	24.0	8.57
Brazil	2.52	NR	NR	24.73	3.23	NR	NR	16.86	155.0	204.0	—	8.77
Canada	.98	1.06	25.42	18.90	.81	.89	21.95	14.22	71.0	78.0	—	15.04
Chile	1.74	2.00	NR	28.64	1.74	2.22	NR	35.92	153.0	198.0	131.0	—
Colombia	.86	1.03	NR	36.18	.72	.89	NR	NR	61.0	75.0	34.0	—
Dominican Republic	NR	2.39	39.67	22.82	NR	2.39	39.67	22.82	—	185.0	—	—
Ecuador	.60	.80	NR	11.76	.19	.73	NR	3.56	16.0	18.0	13.0	5.10
El Salvador	2.49	2.56	NR	NR	NR	NR	NR	NR	125.0	138.0	—	17.64
Jamaica	2.12	2.17	53.26	38.39	2.12	2.17	NR	27.97	175.0	179.0	75.0	—
Mexico	.45	1.13	NR	2.45	.46	.66	NR	2.42	47.0	67.0	6.0	2.52
Panama Republic	2.04	2.17	NR	NR	1.98	2.11	NR	NR	145.0	156.0	—	—
Paraguay	3.61	4.51	68.77	55.52	3.00	3.75	46.62	NR	234.0	282.0	90.0	—
Peru	.69	.84	15.73	10.41	.75	.90	16.90	11.36	78.0	89.0	37.0	10.92
United States	1.24	1.34	43.93	31.35	1.22	1.31	35.28	20.58	91.0	97.0	74.0	17.65
Uruguay	3.31	4.11	NR	32.93	3.18	3.97	NR	31.61	—	—	—	—
Venezuela	.13	.31	2.44	1.68	.13	.31	2.44	2.44	13.0	31.0	—	3.18
WESTERN EUROPE												
Austria	2.46	2.65	48.62	35.78	2.58	2.79	NR	29.73	202.0	222.0	112.0	20.46
Belgium	2.91	3.00	53.84	43.28	3.17	3.24	55.62	34.05	22.70	231.0	—	17.41
Denmark	3.09	3.13	43.41	NR	3.30	3.34	NR	NR	280.0	284.0	142.0	—
Finland	3.03	3.15	53.58	34.78	3.01	3.13	49.80	31.33	207.0	215.0	—	19.74
France	2.82	2.99	32.12	35.29	2.97	3.17	NR	NR	243.0	261.0	97.0	—
Germany, West	2.33	2.43	NR	34.33	2.46	2.57	NR	32.00	209.0	219.0	123.0	25.62
Greece	2.58	2.91	54.23	29.16	2.85	3.21	59.79	32.16	279.0	309.0	112.0	—
Ireland	2.50	2.54	54.05	38.85	2.73	2.77	56.60	36.59	247.0	252.0	126.0	—
Italy	3.28	3.38	32.88	35.98	3.08	3.15	35.09	30.27	244.0	253.0	94.0	22.67
Luxembourg	2.26	2.34	54.78	44.30	2.48	2.54	55.55	30.76	—	—	—	—
Netherlands	2.65	2.71	47.95	35.00	2.89	2.96	52.07	30.33	218.0	225.0	81.0	16.60
Norway	2.83	2.99	NR	NR	2.87	2.93	NR	NR	210.0	213.0	96.0	25.53
Portugal	3.25	3.54	49.00	25.24	3.13	3.45	NR	22.91	217.0	241.0	78.0	12.39
Spain	2.76	3.11	NR	36.04	2.81	3.24	NR	27.82	229.0	264.0	69.0	28.53
Sweden	2.75	2.80	53.59	47.88	2.64	2.70	53.17	40.57	197.0	204.0	78.0	—
Switzerland	2.56	2.58	46.03	38.78	2.79	2.81	47.70	31.32	260.0	262.0	121.0	—
United Kingdom	2.51	2.52	50.53	36.01	2.60	2.65	48.64	33.84	216.0	219.0	—	23.37
Yugoslavia	2.88	3.12	55.52	53.00	2.63	2.91	44.19	42.63	247.0	267.0	186.0	—
MIDDLE EAST												
Iran	1.62	2.16	4.08	NR	.54	.68	NR	NR	54.0	67.0	13.0	21.42
Israel	2.92	3.07	49.10	31.75	2.49	2.64	39.91	26.93	232.0	248.0	90.0	20.16
Lebanon	NR	NR	NR	NR	NR	1.22	NR	19.74	—	94.0	41.0	15.46
Saudi Arabia	.23	.25	NR	NR	.23	.25	NR	NR	19.0	27.0	8.0	—
AFRICA												
Ethiopia	1.38	1.65	NR	NR	1.38	1.65	NR	NR	138.0	165.0	97.0	23.53
Ghana	3.12	3.42	58.02	43.39	2.10	2.25	NR	NR	90.0	105.0	—	—
Kenya	2.34	2.66	41.92	33.64	2.45	2.78	47.02	35.21	178.0	194.0	—	20.72
Morocco	2.93	3.10	NR	29.30	3.45	3.65	NR	34.54	277.0	257.0	121.0	20.60
South Africa, Republic of	2.53	2.59	81.70	44.27	2.48	2.54	79.98	43.34	243.0	246.0	201.0	—
Tunisia	2.07	2.20	14.28	12.24	NR	NR	NR	NR	182.0	193.0	42.0	—
ASIA-PACIFIC												
Australia	1.57	1.87	51.50	NR	1.51	1.63	NR	NR	134.0	130.0	—	—
Burma	.42	NR	NR	NR	.45	NR	NR	NR	145.0	192.0	32.0	—
India	NR	NR	NR	NR	2.49	2.57	44.36	NR	197.0	205.0	55.0	23.10
Indonesia	.91	1.33	11.40	11.40	.91	1.33	11.44	11.44	64.0	86.0	—	—
Japan	2.74	2.93	52.47	44.52	2.72	2.89	53.48	44.80	227.0	246.0	—	22.99
Pakistan	1.91	2.11	NR	18.96	1.70	1.99	NR	18.96	—	—	—	—
Philippines	2.35	2.45	37.20	37.20	2.18	2.28	35.18	32.63	106.0	114.0	—	—
Singapore	1.71	1.85	NR	NR	1.71	1.85	NR	NR	129.0	140.0	93.0	—
Sri Lanka	NR	1.98	39.47	31.76	NR	2.01	NR	25.44	152.0	157.0	54.0	—
Thailand	2.13	2.22	36.97	34.99	1.71	1.81	29.61	28.05	—	—	—	—

NR—Not Reported. Source: Energy Information Administration, 1980 International Energy Annual (issued Oct. '81). Gasoline and fuel oil prices are for the capitals of each country except the U.S., which is an average. All gasoline prices are retails, including taxes and customs duties.

International Prices of Diesel Fuel and Household Kerosine

(U.S. cents per gal.)

Country	Auto Diesel 1/1/81	Auto Diesel 7/31/80	Household Kerosine 1/1/81	Household Kerosine 7/31/81
Western Hemisphere				
Argentina	78¢	73¢	158¢	113¢
Bolivia	61	61	14	14
Brazil	97	97	103	118
Canada	93	80	97	86
Chile	163	157	130	130
Colombia	86	72	86	72
Dominican Republic	97	97	79	79
Ecuador	44	30	24	13
Jamaica	135	135	118	116
Mexico	16	16	09	09
Panama Republic	126	122	116	112
Paraguay	174	144	210	180
Peru	37	40	08	11
United States	121	114	107	89
Uruguay	168	161	178	172
Venezuela	09	09	11	11
Western Europe				
Austria	254	267	392	410
Belgium	205	198	134	139
Denmark	183	187	166	180
Finland	218	211	171	164
France	215	223	NA	NA
Germany, West	226	246	NA	56
Greece	138	152	176	194
Ireland	210	227	NA	172
Italy	135	147	112	121
Luxembourg	157	162	137	140
Netherlands	181	197	177	195
Norway	165	156	157	149
Portugal	159¢	134¢	159¢	134¢
Spain	178	162	189	178
Sweden	139	137	155	151
Switzerland	256	279	NA	NA
United Kingdom	256	272	138	137
Yugoslavia	265	227	246	211
Middle East				
Iran	13	10	14	14
Israel	126	103	128	105
Lebanon	NA	NA	NA	67
Saudi Arabia	NA	NA	NA	NA
Turkey	NA	126	NA	125
Africa				
Ethiopia	97	97	NA	119
Ghana	197	120	167	105
Kenya	NA	NA	NA	NA
Morocco	157	185	157	155
South Africa, Rep. of	275	269	168	165
Tunisia	79	NA	44	NA
Asia-Pacific				
Australia	161	153	133	166
Burma	30	32	30	32
India	NA	111	NA	75
Indonesia	27	27	23	23
Japan	193	193	144	153
Pakistan	117	108	105	96
Philippines	139	122	139	122
Singapore	NA	118	NA	140
Sri Lanka	126	106	82	76

Source: Department of Energy, 1980 International Energy Annual.

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Outlets Decline But At A Much Slower Rate

The service station population continued to decline in 1981 and the outlook is for a further slump in 1982—but the rate of decrease is much slower than most industry prognosticators had expected.

The Bureau of Industrial Economics of the U.S. Department of Commerce says the nose count dropped to 151,253 stations by the end of 1981 and that it could drop another 2.8% to 147,000 by the end of 1982. The 1981 fallout resulted in 4.6% fewer stations than projected at the end of 1980 [see table on this page].

The Bureau's track record in estimating trends in the service station population has been pretty close to reality through the years, a comparison of past surveys confirms.

This time last year, for example, the Bureau estimated the population would be around 152,000 by the end of 1981. The new projection, issued in January, differed only slightly.

This is much better, too, than another forecast in early 1981 that said the number of retail outlets in the U.S. had already dipped to 132,000.

Service stations, as defined by the latest study, "Franchising in the Economy, 1980-1982," are those which generate more than 50% of their income from the sale of petroleum products.

They do not include other thousands of outlets connected with convenience stores, mass merchandisers and in rural areas. If these are taken into consideration, a fair estimate of the total service station universe might be around 220,000, according to knowledgeable industry observers.

But while the number of stations continued to decline last year, the dollar volume per station continued to spurt into uncharted realms.

Total sales of products and services, already up 11.3% in 1981, are expected to shoot up another 12% in 1982 to an unprecedented peak of $117.8-billion. By way of comparison, 1981's total was $105.1-billion and 1980's, $94.5-billion.

(A caveat is important here, however. The Commerce Department put its numbers together in November and December of 1981 before the economic recession really got underway. The recession in 1982 could have a substantial impact on these forecasts.)

The projected slump of 2.8% for 1982 in the service station population is one of the mildest in recent years. The last percentage figure to go below this one was in 1977, when the decline was measured tentatively at 2.4%

Peak year for the service station population was in 1972 when it topped 226,000 outlets. On that basis, the 1982 projection of 147,000 stations would reflect a decline of 35% in approximately 10 years.

One reason the curve in 1981 flattened a bit could be an inverse result of the gasoline glut.

The big push had been to eliminate the 30,000 to 40,000 gal. per month service stations and concentrate on the pumpers. But with gasoline in excess supply everywhere, and national/regional refiners fighting to hold on to their gallonage ratios, there appeared to be a slowdown in the tendency to eliminate outlets for the sake of concentration and efficiency.

Gasoline decontrol occurred almost overnight in January of 1981. But many suppliers took it easy in implementing withdrawal programs they had been planning for years.

Now the fuzz is off the peach. Retrenchment is expected to be in full swing in 1982, and what this will do to the total number of outlets remains to be seen.

Dollar Volumes Increase But Stations Go Down

	1982	% Change	1981	% Change	1980
U.S. station total (a)	147,000	−2.8%	151,250	−4.6%	158,540
Company-owned	26,460	−2.8	27,225	−4.6	28,537
Franchisee-owned	120,540	−2.8	124,025	−4.6	130,003
Total sales of products and services ($000,000)	$117,762	+12.0	$105,145	+11.3	$94,470
Company-owned	21,197	+12.0	18,926	+11.3	17,005
Franchisee-owned	96,565	+12.0	86,219	+11.3	77,465
Average per station	$801,000	+15.3	$695,000	+16.6	$596.000
No. of employees	N.A.		N.A.		570,900

(a) As of Dec. 31 of each year; (b) Service stations as defined by U.S. Census Bureau, i.e., stations with 50% or more of their income being derived from the sale of petroleum products.
Source: "Franchising in the Economy, 1980-1982," Bureau of Industrial Economics, U.S. Department of Commerce, January, 1982.

Comparable U.S. Census Bureau Data (a)

	1977	1972*	1967	% Chng. '77 v. '72	% Chng. '72 v. '67
No. of stations (b)	176,465	226,459	216,059	−22.1%	+4.8%
Total sales ($000,000)	$56,468	$33,655	$22,709	+67.8	+48.2
Average per station	$320,000	$148,600	$105,106	+115.3	+41.4
No. of employees	672,673	747,688	575,207	−10.0	+30.0

(a) Censuses are made every five years; (b) As above, 50% or more of their income from sale of petroleum products; *Special note, 1972 was the peak year.
Source: U.S. Department of Commerce, Censuses of Retail Trade for 1967, 1972 and 1977.
For detailed census reports on 1977, see NPN Factbook Issue, Mid-June, 1980.

The Rise and Fall of U.S. Service Stations

	No. of Stations (a)			Sales ($000,000)		
Year	Total	Company-owned	Franchisee-owned	Total	Company-owned	Franchisee-owned
1982	147,000	26,460	120,540	$117,762	$21,197	$96,565
1981	151,250	27,225	124,025	105,145	18,926	89,219
1980	158,540	30,122	128,418	96,338	18,304	78,034
1979	164,780	31,310	133,480	71,894	13,660	58,234
1978	172,300	32,737	139,563	60,884	12,177	48,707
1977	176,465	33,375	141,160	58,231	11,646	46,585
1976	186,840	37,368	149,472	53,416	10,683	42,733
1975	189,480	37,896	151,584	47,387	9,477	37,910
1974	196,130	39,226	156,904	43,829	8,766	35,063
1973	215,880	47,176	172,704	37,666	7,533	30,183
1972	226,459	44,200	176,259	33,656	6,812	26,844
1971	220,000	44,000	176,000	31,149	6,230	24,919
1970	222,000	44,400	177,600	29,340	5,868	23,472

(a) As defined by U.S. Census Bureau, stations with 50% or more of their income from sales petroleum products.
Source: "Franchising in the Economy, 1980-1982," U.S. Department of Commerce, January, 1982.

Service Station Population by States

1982 vs. 1977

On state as well as the national level, the service station population sagged an average 4.6% in 1981 and is expected to decline another 2.8% by the end of this year. But with fewer stations and the heady costs of inflation, the volume of sales dollars is continuing to mushroom upwards. A caveat, however, is that the dollar projections were made in December 1981 before the recession had deepened. This slowdown in the economy could mean that the 1982 dollar projections are a bit on the optimistic side. The NPN projections are based on Commerce Department reports.

	Total Gasoline Service Stations				Total Dollar Sales (Add 000)			
	1982 (a)	1981 (a)	1980 (a)	1977 (b)	1982 (a)	1981 (a)	1980 (a)	1977 (b)
Alabama	2,966	3,051	3,198	3,562	$1,700,140	$1,517,982	$1,363,865	$ 810,443
Alaska	174	179	188	211	215,744	192,629	173,072	102,845
Arizona	1,378	1,418	1,486	1,656	1,366,971	1,220,510	1,096,595	651,625
Arkansas	2,004	2,062	2,161	2,407	1,039,560	928,197	833,960	495,560
California	11,975	12,320	12,916	14,388	12,026,008	10,737,508	9,647,357	5,732,696
Colorado	2,067	2,127	2,230	2,485	1,485,318	1,326,177	1,191,484	708,010
Connecticut	1,844	1,897	1,988	2,215	1,707,745	1,524,772	1,369,966	814,068
Delaware	363	373	391	435	338,813	302,512	271,799	161,511
District of Columbia	208	214	224	250	289,233	258,244	232,025	138,354
Florida	6,065	6,240	6,541	7,287	5,006,306	4,469,916	4,016,097	2,386,463
Georgia	4,216	4,337	4,546	5,066	2,186,788	1,952,489	1,754,258	1,350,915
Hawaii	345	355	372	415	369,376	329,800	296,316	176,079
Idaho	691	711	745	830	467,710	417,598	375,200	222,954
Illinois	6,504	6,691	7,014	7,815	6,380,638	5,696,998	5,118,597	3,040,967
Indiana	4,032	4,148	4,348	4,867	3,570,195	3,187,674	2,864,038	1,701,885
Iowa	2,851	2,933	3,074	3,424	2,001,446	1,787,005	1,605,575	954,073
Kansas	2,053	2,112	2,214	2,466	1,387,511	1,238,849	1,113,072	661,416
Kentucky	2,873	2,956	3,099	3,452	2,141,157	1,911,747	1,717,652	1,020,672
Louisiana	2,404	2,560	2,683	2,989	1,800,449	1,607,544	1,444,334	858,259
Maine	777	799	838	933	511,877	457,033	410,632	244,009
Maryland	2,050	2,111	2,213	2,465	2,538,196	2,266,246	2,036,160	1,209,948
Massachusetts	3,231	3,324	3,484	3,882	2,705,553	2,415,672	2,170,415	1,289,715
Michigan	5,470	5,628	5,899	6,572	5,435,088	4,852,757	4,360,069	2,590,860
Minnesota	2,730	2,809	2,944	3,280	2,483,350	2,217,277	1,992,163	1,193,895
Mississippi	1,633	1,680	1,761	1,962	952,688	850,614	764,253	454,139
Missouri	4,170	4,290	4,497	5,008	3,139,907	2,803,488	2,518,857	1,496,768
Montana	805	828	868	968	570,946	509,773	458,017	272,166
Nebraska	1,441	1,483	1,555	1,732	1,105,646	987,184	886,958	529,836
Nevada	534	549	575	641	617,970	551,759	495,740	294,582
New Hampshire	586	603	632	704	497,706	444,380	399,263	237,251
New Jersey	4,453	4,581	4,802	5,350	3,783,618	3,378,230	3,035,247	1,803,619
New Mexico	1,157	1,190	1,247	1,389	768,497	686,158	616,494	366,336
New York	7,695	7,917	8,298	9,245	6,070,804	5,420,361	4,870,046	2,893,091
North Carolina	4,808	4,946	5,185	5,775	2,853,229	2,547,526	2,288,882	1,360,111
North Dakota	573	589	617	687	422,712	377,421	339,102	201,503
Ohio	7,341	7,552	7,916	8,820	6,538,380	5,837,839	5,245,138	3,116,790
Oklahoma	2,549	2,622	2,748	3,063	1,374,691	1,227,403	1,102,788	655,239
Oregon	1,820	1,872	1,962	2,185	1,373,609	1,226,437	1,101,920	654,788
Pennsylvania	7,486	7,702	8,073	8,994	5,993,347	5,351,203	4,807,909	2,856,978
Rhode Island	579	596	625	697	454,101	405,447	364,283	216,467
South Carolina	2,498	2,570	2,694	3,001	1,514,007	1,351,792	1,214,548	721,715
South Dakota	715	736	772	861	505,071	450,956	405,172	240,764
Tennessee	3,404	3,502	3,671	4,090	2,414,045	2,155,397	1,936,565	1,150,756
Texas	10,610	10,916	11,442	12,747	7,225,495	6,451,335	5,796,348	3,444,333
Utah	956	984	1,031	1,149	770,150	687,634	617,820	367,125
Vermont	449	462	484	540	292,744	261,379	234,842	139,550
Virginia	3,322	3,418	3,583	3,992	3,107,116	2,774,211	2,492,553	1,481,137
Washington	2,500	2,572	2,696	3,005	1,986,600	1,773,750	1,593,666	946,996
West Virginia	1,513	1,557	1,632	1,818	1,035,008	924,114	830,291	493,332
Wisconsin	3,365	3,462	3,629	4,043	2,622,666	2,341,666	2,103,923	1,250,204
Wyoming	538	553	580	647	449,884	401,682	360,900	214,456
Total	**146,967**	**151,200**	**158,491**	**176,465**	**$118,456,486**	**$105,766,505**	**$95,028,307**	**$56,468,144**

(a) Projections by NPN based on Census data and other Commerce Department reports; (b) U.S. Census Bureau Retail Trades census, 1977.
Source: NPN projections based on Commerce Department data.

U.S. Service Stations By Types, 1981

Split islands appeared to have dominated gasoline marketing in 1981, according to the latest informal survey of oil marketers—majors, independents, jobbers, small retailers, and a handful of convenience store chains as well.

This seems to reflect the stiffening street competition for gallonage in the face of declining consumption and the economic recession that bit into pocketbooks last year. If, for example, it could be assumed that one-half of the split islands were self-service—say, 29,500—that, plus the acknowledged number of self-service stations would boost the self-service total to 60,000 outlets—about one-third of the retail industry.

The 1981 survey was bobtailed from nine to seven categories to eliminate what seemed to be excessive duplication in some of the earlier replies.

It should be borne in mind that the percentages and totals on this page are only *benchmark estimates rather than hard data* culled from documented research.

The data are obtained from NPN questionnaries which are mailed in the forepart of the year. About 400 replies are received, of which about 40% or so include data on the number of outlets they own or supply.

These statistics are weighted then averaged against known industry totals for a profile of basic gasoline operations.

It also should be borne in mind that this year's data are not comparable to those of the preceding years because the population base changes annually, and respondents are not always the same.

Another factor to be considered is that suppliers, jobbers, and retailers often use different terminology and classifications within the framework of their own companies.

The base numbers in this year's profile use a 1981 service-station population, as defined by the U.S. Census Bureau, of 151,250, with another 17,000 thrown in to account for convenience stores with gasoline operations.

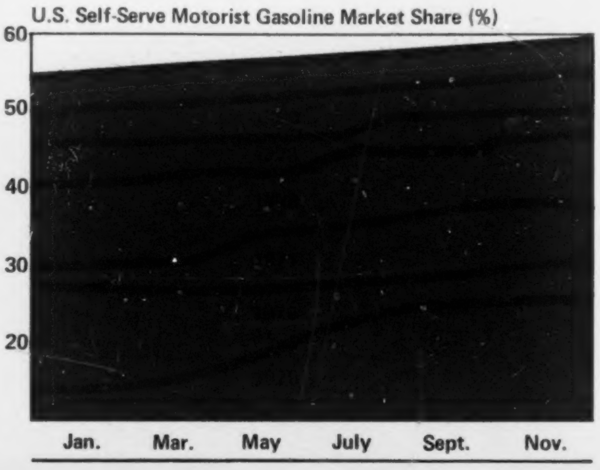
Where Gasoline Was Sold (1981)

Type of Outlet	Weighted Number (a)	Weighted Percentage (a)
Split Islands	59,392	35.3%
Full Service	44,754	26.6
Self Service	29,948	17.8
Convenience Stores	17,500	13.2
Car Care	6,898	4.1
Car Washes	3,701	2.2
Truck Stops	1,514	0.9
Total	**163,707 (b)**	**100.1%**

(a) Weighted averages were obtained from NPN questionnaires and were extrapolated to reflect the industry as a whole based on 1981 population trends; (b) This total includes 151,250 service stations, as defined by the U.S. Census Bureau, and an estimated 17,000 convenience stores selling gasoline in 1981. See Retail Market section for service and C-store population counts.
Source: NPN questionnaires.

How Self-Service Appeals to Motorists

Self-service gasoline marketing's appeal to motorists is still on the upside, according to the internal report of a major oil company. Its finding in January 1982 indicated the total of motorists preferring self-service is now at the 60% mark—six out of every 10 drivers. This is another increase of 5% or so for the second year in a row. Only two states—Oregon and New Jersey—still ban self-service gasoline marketing.


U.S. Self-Serve Motorist Gasoline Market Share (%)

State	% of Buyers
Utah	83%
Arizona	81
Colorado	79
New Mexico	78
South Carolina	76
Texas	74
Wisconsin	74
Nevada	73
North Carolina	73
Idaho	72
Wyoming	71
California	70
Oklahoma	70
Montana	69
Tennessee	69
Washington	69
Florida	68
Louisiana	67
Missouri	66
Virginia	65
Arkansas	64
Michigan	64
Georgia	63
Illinois	63
Indiana	63
Iowa	63
Alabama	61
South Dakota	61
Mississippi	60
Dist. of Columbia	59
Minnesota	59
Maryland	58
Delaware	55
Kansas	55
Nebraska	55
North Dakota	55
Kentucky	54
Ohio	54
Connecticut	47
West Virginia	45
Rhode Island	44
New Hampshire	37
New York	37
Pennsylvania	36
Massachusetts	30
Maine	28
Vermont	23

Source: Amoco Oil Co.

Business at Service Stations

Dollar Volume

Year	No. of service stations	Total sales (add $000,000,000)	Avg. per station (add $000)
1982	**147,000 (a)**	**$117.7**	**$800.6**
1981	151,250 (a)	105.1	695.0
1980	158,540 (a)	96.3	608.0
1979	164,790 (a)	70.9	430.0
1978	172,300 (a)	60.9	353.0
1977	176,465 (b)	56.5	320.0
1976	186,400 (a)	48.0	257.0
1975	189,480 (a)	43,8	232.0
1972	226,459 (b)	33.7	148.8

(a) Franchise in the Economy 1980-82, U.S. Department of Commerce; date are as of the end of the year.

(b) Bureau of Census; by its definition of gasoline service stations, 50% or more of dollar volume comes from the sale of petroleum products.

Product Sales, Passenger Cars

		Gasoline		Motor oil	
Year	Privately owned passenger cars (add 000)	Avg. gal. per car	Annual retail market (add 000,000 gal.)	Avg. qt. per year	Annual retail market (add 000,000 qt.)
1982	**126.000**	**610**	**76,860**	**7.3**	**900**
1981	124,341	620	77.091	7.3	900
1980	121,723	638	77,659	7.3	907
1979	120,248	664	79,845	7.3	880
1978	116,534	715	83,760	7.6	921
1977	113,696	706	80,269	7.9	900
1976	110,188	711	78,344	8.0	887
1975	106,712	712	75,979	9.5	1,014
1972	96,567	755	72,908	10.0	966

Source: Federal Highway Administration through 1980: NPN estimates for 1981 and 1982 and for motor oil.

Station Customers

		Privately owned passenger cars		Households owning cars		Licensed drivers		Women drivers	
Year	No. of service stations	Total (add 000)	Avg. per station	Total (add 000,000)	Avg. per station	Total (add 000,000)	Avg. per station	Total (add 000,000)	Avg. per station
1982	**147,000 (a)**	**126.000**	**857.1**	**72.0**	**489.8**	**149.0**	**1,013.6**	**70.0**	**476.2**
1981	151,250 (a)	124.341	822.0	70.0	460.5	147.3	969.0	68.8	452.6
1980	158,540 (a)	121.723	767.8	67.2	423.8	145.3	916.7	68.1	429.5
1979	164,790 (a)	120,248	731.1	65.9	400.0	143.3	868.3	66.8	403.5
1978	172,300 (a)	116,534	676.3	64.6	375.0	140.8	817.1	65.3	379.0
1977	176,465 (a)	113,696	644.3	63.3	365.5	138.4	784.4	63.7	361.0
1976	186,400 (a)	110,188	591.1	62.0	332.6	130.3	689.4	57.9	306.3
1975	189,480 (a)	106,712	563.2	60.5	319.3	127.8	662.2	56.8	294.3
1972	226,459 (b)	96,567	426.4	52.8	232.2	118.4	522.8	52.6	232.3

(a) Franchising in the Economy 1980-82, Department of Commerce.

(b) Bureau of Census; by its definition of gasoline service stations, 50% or more of dollar volume comes from the sale of petroleum products.

Source: Based on data from Motor Vehicle Mfgs. Assn., Federal Highway Administration, and NPN estimates for 1981 and 1982.

How Stations Rank in Sales

	1981	%Change '81-'80	1980	%Change '80-'79	1979	%Change '79-'78	1978	%Change '78-'77
All Retail Stores	$1,045.7	9.3%	$956.7	7.0%	$894.3	12.0%	$798.8	10.3%
Food Group	238.3	9.6%	217.5	11.1	195.8	12.2	174.5	10.1
Automotive Group	187.4	12.2	167.0	(5.8)	177.3	8.3	163.7	10.3
General Merchandise	126.6	8.9	116.3	6.0	109.7	10.3	99.5	10.4
Eating and Drinking Place	95.3	10.0	86.6	8.8	79.6	8.4	70.1	10.2
Gasoline Service Stations	103.0	9.0	94.5	29.1	73.2	20.2	60.9	4.6
Apparel Group	47.6	7.0	44.5	5.0	42.4	12.2	37.8	10.2

Source: Survey of Current Business, Department of Commerce, Vol. 62, No. 1, January, 1982.

Personal Consumption Expenditures

	(Billions of Dollars)					Seasonally Adjusted at Annual Rate—1981			
	1981	%Change '81-'80	1981	%Change '80-'79	1979	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.
Total Expenditures	$1,858.1	11.1%	$1,672.8	10.7%	$1,510.9	$1,810.1	$1,829.1	$1,883.9	$1,909.5
Durable Goods	232.0	9.5	211.9	(0.2)	212.3	238.3	227.3	236.2	226.4
Automobiles	98.2	9.2	89.9	(5.9)	95.5	105.4	93.4	101.6	92.3
Furniture	92.7	9.6	84.6	4.3	81.1	92.3	92.4	93.2	93.0
Other Durable	41.2	10.5	37.0	4.2	35.8	40.6	41.6	41.4	41.1
Nondurable Goods	743.4	10.0	675.7	2.2	602.2	726.0	735.3	751.3	760.9
Food	382.1	10.5	345.7	10.8	312.1	372.5	377.8	386.5	391.6
Clothing and Shoes	115.9	10.6	104.8	6.8	98.9	113.4	115.8	117.5	116.8
Gasoline and Oil	94.5	6.2	89.0	30.1	68.4	93.5	92.4	95.1	97.1
Fuel Oil and Coal	21.0	6.1	19.8	2.4	16.0	20.5	21.0	21.3	21.0
Other Nondurable	150.9	10.8	136.2	10.8	122.9	146.6	149.4	152.1	155.5
Services	882.7	12.4	785.2	12.8	696.3	845.8	866.5	896.4	922.2

Source: Survey of Current Business, Department of Commerce, Vol. 62, No. 1, January, 1982.

Average Annual Yields from 1 bbl. of Crude Oil

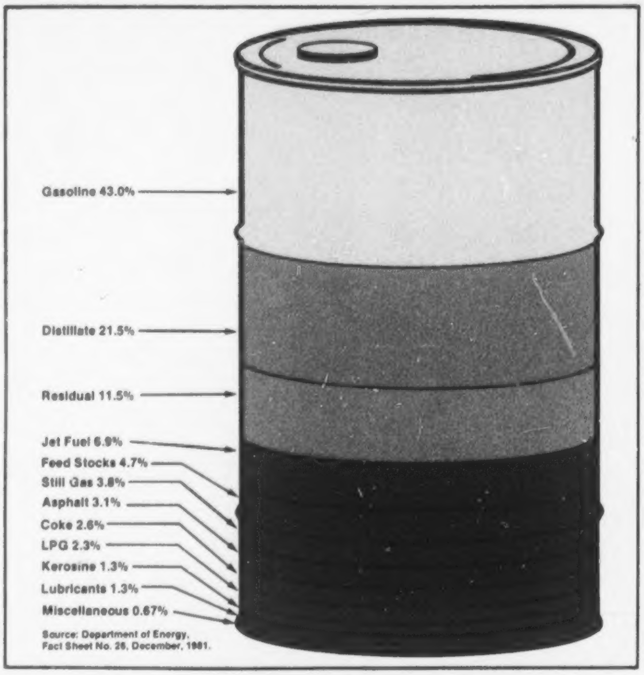
In looking at this annual yield pattern, it must be remembered that some refineries can maximize gasoline production (as high as 60%) and some can maximize fuel oils (as high as 50%), thus varying their output extensively. Data used in this concept are from 1979 averages, as compiled by Department of Energy.

Here are the yields for a standard 42-gal. bbl.:

Product	Gallons	Product	Gallons
Gasoline	18.06	Asphalt	1.30
Distillate	9.03	Coke	1.09
Residual	4.83	LP-Gas	0.97
Jet Fuel	2.90	Kerosine	0.55
Feedstocks	1.97	Lubricants	0.55
Still Gas	1.60	Miscellaneous	0.67

(These yields total 43.52 gal. but are balanced out by the fact that 1.52 gal. of hydrogen are added during the refining processes.)

Legend has it that the 42-gal. bbl. dates back to the 15th century when King Edward IV of Norway standardized the herring barrel at 42 gal. Subsequently this became a standard for whiskey barrels in the U.S. The oil barrel was modeled after that in 1866 for all U.S. shipments. Canada uses an imperial gallon which is larger than the U.S. variety while overseas most countries use the metric system for weights and measures.



Source: Department of Energy, Fact Sheet No. 26, December, 1981.

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Credit-Card Sales Boom Continues

More than 68-million people carried oil-company credit cards in 1979, and charged more than $21.4-billion worth of gasoline and other oil-company products and services to them. The total number of cardholders was down somewhat in 1979 vis a vis 1978, but the charge volume was up a spanking 19%, according to *The Nilson Report*, a privately-published newsletter for credit-card executives. Nilson, a Los Angeles-based firm, predicted that by 1985 the number of people carrying oil-company credit cards would jump 58% to 107-million. The total charge volume will rise at the same time to $54.1-billion, with the average monthly statement running around $112.78.

The projections below are the most recent available. These were made by *The Nilson Report* in the summer of 1980—long before President Reagan swept into office and decontrolled the gasoline market. One result was that Nilson made no oil-company credit-card report for the year 1980.

He had planned to issue a 1981 update in the forepart of 1982 but various traumatic changes, such as the imposition of service charges by a number of oil companies, and the withdrawl by Atlantic Richfield from credit operations entirely, made such a mish-mash out of available data that Nilson deferred its 1981 projections until next fall of 1982.

22 Largest Oil-Company Credit-Card Issuers in the U.S.—1979*

	Oil Company Credit-Card Sales							
	Total Cards (millions)	Total Accounts (millions)	Accounts Billed Monthly (millions)	Volume on Company Cards ($millions)	Bank-Card Sales ($millions)	T & E Card Sales ($millions)	Total Credit Sales ($millions)	Branded Retail Outlets (locations)(a)
Texaco (b)	17.70	8.50	4.80	$ 3,061	-	-	$ 3,061	25,631
Exxon	11.70	6.50	4.00	2,400	-	-	2,400	23,672
Amoco	11.02	6.50	3.40	2,400	-	-	2,400	21,251
Gulf	11.01	5.20	2.30	1,500	-	-	1,500	17,003
Mobil	10.90	5.50	3.00	1,840	-	-	1,840	17,747
Shell	10.50	6.00	3.50	1,900	$220	-	2,120	17,137
Chevron	8.10	4.50	2.70	1,700	350	-	2,056	14,689
Atlantic Richfield	6.85	3.60	1.95	1,100	-	-	1,100	8,312
Union	6.20	3.40	1.85	1,700	240	-	1,940	12,197
Sunoco	5.40	5.00	1.00	500	100	$25	675	10,784
Phillips	5.00	2.80	1.00	670	100	6	776	10,080
Sohio	2.82	1.49	.80	660	-	-	660	4,410
Conoco	1.95	1.20	.40	185	-	-	185	4,341
Citgo (b)	1.80	.82	.44	210	110	-	320	5,178
Getty	1.45	.78	.40	190	100	18	308	5,038
Marathon	1.00	.60	.18	136	-	-	136	1,851
Amer. Petrofina	.78	.44	.18	130	65	-	195	4,144
Diamond Shamrock (b)	.77	.49	.19	120	24	9	153	1,454
Kerr-McGee (b)	.50	.21	.09	73	15	-	88	1,595
Clark	.25	.13	.08	60	-	-	60	1,800
Ashland	.18	.09	.05	35	45	-	80	2,125
Tenneco	.12	.05	.02	30	-	-	30	489
Others	3.00	1.60	.90	800	125	25	950	8,000
Totals	**119.00**	**65.40**	**32.23**	**$21,400**	**$1,494**	**$83**	**$23,033**	**218,928**

(a) Number of outlets includes hotels, airports, garages, mass merchandisers and other places where gasoline can be purchased;
(b) Estimates not verified. *1980 data. See caveat in copy at the top of this page.

Oil-Company Credit-Card Trends—1980-1985 (a)

	1980	1981	1982	1983	1984	1985
Cardholders						
People owning cards	68.7	78.7	96.4	100.0	103.6	107.1
Cards						
Total (millions)	110.0	118.0	135.0	140.0	145.0	150.0
Avg. per person	1.6	1.5	1.4	1.4	1.4	1.4
Transactions						
Total annually (billions)	1.5	1.7	1.8	1.8	1.8	2.0
Avg. gallons per sale	11.7	11.2	10.5	10.0	9.6	9.0
Avg. price per gallon	$1.35	$1.65	$2.00	$2.50	$2.85	$3.05
Avg. sale (transaction)	$15.80	$18.48	$21.00	$25.00	$27.36	$27.45
Charge Volume						
Total annually ($billions)	$23.9	$30.8	$37.0	$44.4	$50.6	$54.1
Avg. monthly statement	$49.72	$68.79	$77.04	$92.45	$105.38	$112.78
Pump Locations						
Total outlets	212,000	196,000	190,000	185,000	180,000	170,000

(a) 1980 Projection, the most recent available. Note caveat in copy above.
Source: The Nilson Report, July, 1980.

C-Stores Continue Their Expansion in Gasoline Marketing

Although the pace is a bit slower than the hectic years of the early '70s, gasoline marketing continues to be impressive in the C-store industry.

This is confirmed by the latest pair of reports on gasoline and groceries from private industry and government sources.

The independent study, the 11th annual "Dollars Per Day Survey of the Small Food Industry," indicates that C-stores sold about 5.3% of all of the gasoline marketed in 1980.

Industry sources believe that the C-stores did a bit better than that in 1981 because of the intensity of their competition, even in a declining marketplace.

The table at the right indicates that the number of C-stores with gasoline facilities dipped slightly in 1980. But that was mostly because John F. Roscoe, of Walnut Creek, Calif., dropped UtoteM from his 1980 survey. If Utotem's numbers are factored in, then the 1980 total would be 6,073 stores, or an increase of 7.9% over 1979—not a 1.7% decrease as the new tabulation shows.

Roscoe's survey covers only about a third of the C-store industry. It concentrates only on the 12 chains that are publicly owned.

No hard figures are available but industry sources believe the C-store universe consists of about 35,000 to 40,000 stores. If Roscoe's percentages are applied against that universe, it could mean that as many as 15,500 to 17,500 C-stores are marketing gasoline.

By sheer size, Southland is the biggest gasoline vendor in the C-store industry. Of its 6,895 stores in 1980, 2,246 sold gasoline, or 33% of Southland's units.

Percentagewise, Hop-In and Sunshine Jr. fared better, however. Of Hop-In's 152 stores, 84% sold gasoline. Of Sunshine's 353 outlets, 82% marketed gasoline.

Roscoe notes that the 12 chains in his survey accounted for about 1.9-billion gal. of gasoline sales in 1980. With the same extrapolation as mentioned above, this would give the C-store industry a volume of about 5.8-billion gal., in terms of the study. The national market in 1980 was about 109-billion gal.

Roscoe says the average margin for gasoline in the C-store chain in 1980 was 6¢ gal.

Government Data

The federal report on C-stores deals only with franchise operations.

Thus the population it discusses accounts for 16,000 to 17,000 stores—considerably less than half of the presumed total population of 39,000.

The figures are meaningful, however, because they isolate and identify trends.

This report is prepared by the U.S. Commerce Department's Bureau of Industrial Economics. The current one is entitled, "Franchising in the Economy 1980-1982."

The accompanying tables are self-explanatory though it should be borne in mind that the Dollars Per Day study involves only 12 chains and the Commerce Department report considers only franchise operations. The numbers therefore are not comparable and must be viewed as trends only.

Growth of Gasoline Units in 1981

$ Per Day Profit Ranking	No. of Stores	No. of Gasoline Units	% of Stores with Gasoline	No. of Gasoline Units Added During Year	No. of Stores Added During Year
1. Shop & Go	412	265	64%	40	31
2. Circle K	1,194	753	63%	27	-6
3. National Convenience	832	478	57%	32	15
4. Southland	6,895	2,246	33%	139	90
5. Lil' Champ	148	44	30%	12	10
6. Dillon	338	242	72%	42	14
7. Mini Mart	112	29	26%	18	-3
8. Conna	416	314	75%	66	80
9. Sunshine Jr.	353	288	82%	28	17
10. Li'l General	474	204	43%	37	10
11. Hop-In	152	127	84%	13	12
12. Munford	1,119	543	49%	-12	-65
Totals	**12,445**	**5,533**	**44.45%**	**+442**	**+205**

Eight Year Box Score on Growth

Survey Year	No. of Stores	No. of Stores with 'Gas' Units	% Change	No. of 'Gas' Units Added During Year	No. of Stores with 'Gas'
1981 (a)	12,445	5,533	-1.7%	442	44.45%
1980	13,167	5,630	9.3	447	42.76
1979	12,920	5,153	12.4	569	39.88
1978	12,597	4,584	20.8	792	36.38
1977	11,953	3,792	36.1	959	31.72
1976	11,356	2,786	29.7	557	24.53
1975	10,143	2,147	9.3	194	21.16
1974	9,258	1,964	—	—	21.21

(a) Decrease reflects fact UtoteM was dropped from 1981 survey. UtoteM closed out the year with 931 stores, of which 540, or 58%, had gasoline pumps. If these numbers were factored in the 1981 totals there would be 6,073 stores with gasoline facilities, or an increase of 7.9%

Source: John F. Roscoe, Eleventh Annual Dollars Per Day Survey, Copyrighted by John F. Roscoe.

Government Franchise Projections

Item	1982 (a)	1981 (a)	1980
Total number of establishments	17,312	16,255	15,614
Company-owned	10,076	9,694	9,679
Franchisee-owned	7,236	6,561	5,935
Total sales of products and services (Add $000)	$9,052,060	$8,653,224	$7,821,186
Company-owned	5,557,297	5,087,539	4,722,845
Franchisee-owned	3,494,763	3,565,685	3,098,341
Average sales per establishment	$523,000	$532,000	$501,000
Company-owned	552,000	525,000	488,000
Franchisee-owned	483,000	543,000	522,000

(a) Data estimated by respondents.

Distribution by Establishments (1980)

Size Groups	Franchising Companies Number	Establishments Number	Establishments Per Cent	Sales ($000)	Sales Per Cent
Total	**28**	**15,614**	**100.0%**	**$7,821,186**	**100.0%**
1,001 and greater	4	10,084	64.6	5,560,592	71.6
500 to 1,000	3	2,283	14.6	169,518	11.3
151 to 500	8	2,646	16.9	1,108,836	14.2
51 to 150	7	499	3.2	884,580	2.2
11 to 50 0 - 10	6	102	0.7	57,660	0.7

Source: "Franchising in the Economy, 1980-1982," Bureau of Economics, U.S. Department of Commerce, January, 1982.

Convenience Store Population—1980

		Population	No. of households	No. of convenience stores	Total Store Sales	
					Gasoline	In-store
New England		**12,348,493**	**4,361,987**	**1,678**	**$ 239,858**	**$ 590,582**
	Maine	1,124,660	395,184	118	33,429	42,447
	New Hampshire	920,610	323,493	95	26,825	35,189
	Vermont	511,456	178,325	31	8,667	9,256
	Massachusetts	5,737,037	2,032,717	918	88,397	346,747
	Rhode Island	947,154	338,590	130	25,175	36,530
	Connecticut	3,107,576	1,093,678	386	57,365	120,413
Mid-Atlantic		**36,788,174**	**13,108,507**	**3,515**	**321,945**	**1,448,994**
	New York	17,557,288	6,339,762	929	125,619	383,889
	New Jersey	7,364,158	2,548,225	1,092	29,501	525,324
	Pennsylvania	11,866,728	4,220,520	1,494	166,825	539,781
East North Central		**41,669,738**	**14,650,797**	**4,298**	**586,826**	**1,610,867**
	Ohio	10,797,419	3,833,706	1,894	126,016	735,291
	Indiana	5,490,179	1,926,978	509	135,778	150,897
	Illinois	11,418,461	4,042,744	737	114,825	327,668
	Michigan	9,258,344	3,195,015	743	88,048	292,641
	Wisconsin	4,705,335	1,652,354	415	122,159	104,370
West North Central		**17,184,066**	**6,205,656**	**2,242**	**497,762**	**723,366**
	Minnesota	4,077,148	1,445,616	622	110,603	194,213
	Iowa	2,918,387	1,052,847	396	116,381	79,646
	Missouri	4,917,444	1,793,720	572	85,476	227,227
	North Dakota	652,695	227,657	38	5,778	8,692
	South Dakota	690,178	242,357	73	19,397	28,711
	Nebraska	1,570,006	571,411	157	47,048	42,980
	Kansas	2,363,208	872,048	384	113,079	141,897
South Atlantic		**36,943,139**	**13,153,984**	**9,032**	**1,999,898**	**2,508,642**
	Delaware	595,225	207,429	101	12,381	36,631
	Maryland	4,216,446	1,460,635	550	29,762	265,660
	District of Columbia	637,651	252,952	101	5,245	43,086
	Virginia	5,346,279	1,862,854	1,119	145,682	458,414
	West Virginia	1,949,644	686,311	275	85,333	96,209
	North Carolina	5,874,429	2,040,562	1,326	435,634	275,348
	South Carolina	3,119,208	1,029,796	788	230,603	153,381
	Georgia	5,464,265	1,872,089	1,313	316,524	285,976
	Florida	9,739,992	3,741,356	3,459	738,734	893,937
East South Central		**14,662,882**	**5,050,397**	**3,117**	**837,825**	**799,758**
	Kentucky	3,661,433	1,263,565	677	200,619	219,905
	Tennessee	4,590,750	1,618,361	1,020	288,063	300,799
	Alabama	3,890,061	1,341,302	851	221,619	174,864
	Mississippi	2,520,638	827,169	569	127,524	104,190
West South Central		**23,743,134**	**8,274,274**	**6,166**	**1,342,505**	**2,246,994**
	Arkansas	2,285,513	815,664	333	88,730	68,817
	Louisiana	4,203,972	1,411,113	734	182,825	209,087
	Oklahoma	3,025,266	1,118,532	902	259,587	240,232
	Texas	14,228,383	4,928,965	4,197	811,363	1,728,858
Mountain		**11,368,330**	**3,984,616**	**2,315**	**295,620**	**934,936**
	Montana	786,690	283,742	129	37,556	39,599
	Idaho	943,935	324,107	135	20,333	57,133
	Wyoming	470,816	166,049	74	18,571	22,173
	Colorado	2,888,834	1,060,822	536	55,762	237,406
	New Mexico	1,299,968	440,575	319	45,032	118,803
	Arizona	2,717,866	956,717	826	80,524	338,383
	Utah	1,461,037	448,603	147	21,810	55,860
	Nevada	799,184	304,001	149	16,032	65,579
Pacific		**31,796,869**	**11,586,391**	**3,437**	**377,761**	**1,535,861**
	Washington	4,130,163	1,539,681	483	63,651	208,918
	Oregon	2,632,663	991,393	385	30,222	158,590
	California	23,668,562	8,630,198	2,449	273,396	1,122,513
	Hawaii	965,000	294,051	55	7,841	19,869
	Alaska	400,481	131,068	65	2,651	25,971
	Total	**226,504,825**	**80,376,609**	**35,800**	**$6,500,000**	**$12,400,000**

Source:C-STORE BUSINESS Magazine, 1981

U.S. Market Shares by Brand Category and Average Prices

	Percent of Total Gallonage Sales					Cents per Gal. Including Taxes (b)					
	Refiner-Marketers		Independent Marketers			Refiner-Marketers		Independent Marketers			
Year	Majors (a)	Other Refiner Brands	Majors (a)	Other Refiner Brands	Non-Branded	Majors (a)	Other Refiner Brands	Majors (a)	Other Refiner Brands	Non-Branded	U.S. Average
1981 Average (c)	**7.7%**	**11.3%**	**57.4%**	**12.1%**	**11.5%**	**131.0¢**	**127.9¢**	**134.7¢**	**131.0¢**	**130.4¢**	**132.7¢**
1980 Average	**7.7**	**11.6**	**57.8**	**11.9**	**11.2**	**118.9**	**116.3**	**121.0**	**118.3**	**117.5**	**124.5**
1979 Average	**7.9**	**10.9**	**58.4**	**11.3**	**11.5**	**84.3**	**84.6**	**86.0**	**84.6**	**85.1**	**85.4**
1978 Average	**7.6**	**10.5**	**58.5**	**11.7**	**11.8**	**61.7**	**60.8**	**64.5**	**62.6**	**60.7**	**63.2**
1977 Average	**7.1**	**10.1**	**59.6**	**11.4**	**11.8**	**59.4**	**58.6**	**62.2**	**59.8**	**58.4**	**60.9**
1981											
January	7.5	11.5	57.5	12.3	11.2	124.4	121.1	126.8	123.6	123.2	125.2
February	7.7	11.5	57.1	12.2	11.5	131.8	126.8	132.8	129.4	129.9	131.3
March	7.8	11.7	57.1	11.8	11.5	135.2	131.7	135.0	132.1	132.7	133.9
April	7.7	11.4	56.9	12.1	11.9	133.6	130.7	137.7	133.1	131.6	135.3
May	7.6	11.8	56.6	12.2	11.9	132.3	130.0	136.5	132.1	131.2	134.4
June	7.6	11.3	57.7	12.1	11.4	131.6	128.7	136.6	132.2	131.7	134.1
July	7.6	11.0	57.6	12.2	11.6	130.6	127.7	136.1	132.1	131.4	133.7
August	7.8	10.2	58.4	12.3	11.3	130.1	127.3	135.5	132.0	130.7	132.2
September	7.9	11.2	57.7	11.9	11.3	129.6	126.7	135.6	132.5	131.5	133.3
(This series was discontinued by DOE in late 1981 because of budget cuts)											
1980											
January	7.8	10.8	57.7	12.0	11.7	107.8	108.7	109.3	107.5	108.5	108.8
February	7.7	11.1	57.2	11.6	12.4	114.6	113.0	115.2	112.1	113.8	114.4
March	7.7	11.8	56.9	12.3	11.3	119.4	116.2	119.3	116.4	117.5	118.3
April	7.7	11.6	57.0	11.9	11.9	120.4	116.9	121.5	118.7	119.0	120.4
May	7.6	11.5	56.9	11.2	12.9	121.7	118.4	123.2	120.5	119.2	121.8
June	7.5	11.1	57.5	11.1	12.7	122.1	119.1	124.6	122.1	120.8	122.9
July	7.6	11.1	57.1	11.7	12.5	121.6	118.9	124.3	122.0	119.6	122.6
August	7.8	11.6	56.9	11.3	12.4	120.9	118.3	123.7	121.3	118.8	122.0
September	7.6	12.1	57.2	11.3	11.8	119.6	116.8	122.6	120.0	118.6	120.9
October	7.6	11.9	56.4	12.1	12.0	119.1	116.0	122.1	119.7	117.9	120.4
November	7.6	11.6	56.2	12.2	12.4	119.1	115.9	122.5	119.4	117.1	120.4
December	7.8	11.7	57.9	11.8	10.7	120.7	117.9	123.2	120.0	119.1	121.4
1979											
January	8.2	10.8	59.0	10.7	11.3	65.9	65.8	68.3	66.8	65.7	67.4
February	7.9	10.5	59.0	10.7	11.9	67.3	66.9	69.3	68.0	66.7	68.4
March	8.0	11.1	59.1	11.0	10.8	70.4	70.5	71.6	71.0	68.9	71.0
April	7.6	11.2	58.2	11.6	11.4	71.7	71.9	75.5	74.1	74.2	74.5
May	7.8	10.9	58.8	11.4	11.2	79.2	80.0	79.7	78.4	79.5	79.6
June	7.3	11.0	59.7	10.7	11.3	83.7	84.0	84.5	82.5	84.3	84.1
July	7.8	11.0	58.1	11.3	11.8	88.3	89.6	89.2	87.9	90.3	89.1
August	8.3	10.7	58.3	11.7	11.0	92.5	93.3	93.3	92.1	93.2	93.0
September	8.0	10.8	57.8	11.8	11.6	94.5	94.5	96.6	95.1	97.4	96.1
October	8.0	11.3	57.5	11.7	11.5	97.1	97.4	98.7	97.1	98.8	98.2
November	7.9	10.5	57.4	12.0	12.2	98.6	98.8	100.9	99.1	99.1	100.1
December	7.8	11.2	58.2	11.3	11.5	101.7	102.1	103.8	102.5	103.1	103.2

(a) Primary and secondary brand names belonging to the following 15 major refiners: Amoco, Atlantic Richfield, Chevron, Cities Service, Conoco, Exxon, Getty, Gulf, Marathon, Mobil, Phillips, Shell, Sun, Texaco, and Union of California; (b) Weighted average price includes all grades of gasoline and types of service (full & self). Refiner-marketers' prices include an estimated weighted average tax and independent marketers include reported taxes; (c) This is an average for the first 9 months of 1981 when DOE discontinued the series.

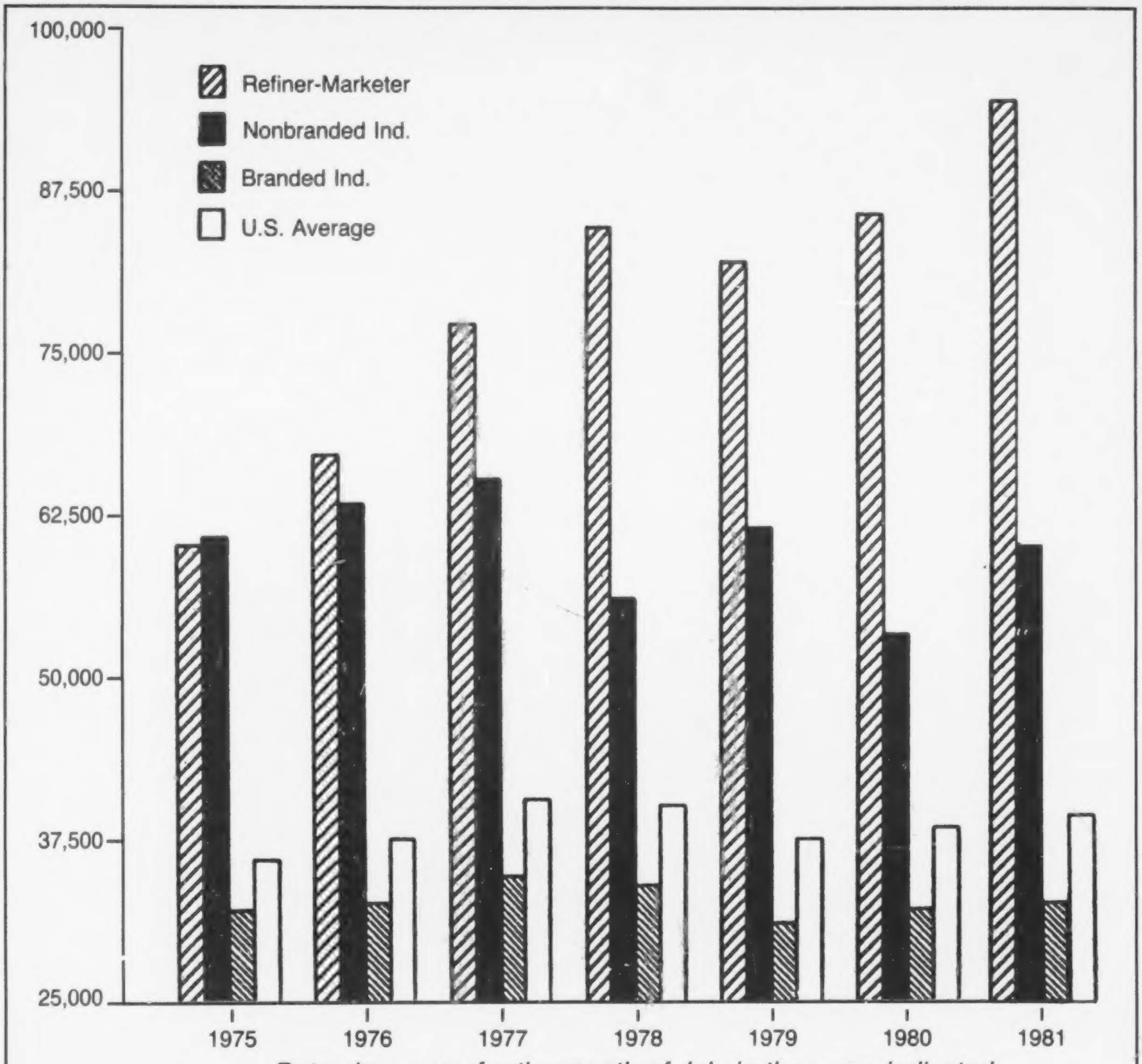
Source: Energy Information Administration, Retail Sales of Gasoline.

U.S. Market Shares of Gasoline at Service Stations (a)

	% of Total Gallonage Sales			Millions of Gal. per Day			
Year	Refiner-Marketers	Nonbranded Independents	Branded Independents	U.S. Average	Refiner-Marketers	Nonbranded Independents	Branded Independents
1981 (b)	18.9%	11.5%	69.5%	191	36	22	133
1980	19.2	11.2	68.8	190	37	23	131
1979	18.8	11.5	89.7	201	38	23	140
1978	18.0	11.8	70.2	225	41	26	158
1977	17.2	11.8	71.0	227	39	27	161
1976	16.9	10.9	72.1	213	36	23	154
1975	14.8	10.2	75.0	209	31	21	157
1981							
January	19.0	11.2	69.8	185	35	21	129
February	19.2	11.5	69.3	188	36	22	131
March	19.5	11.6	68.9	186	36	21	128
April	19.1	11.9	69.0	191	36	23	132
May	19.4	11.9	68.7	189	37	22	130
June	18.8	11.4	69.8	199	38	23	139
July	18.7	11.6	69.8	200	37	23	139
August	18.0	11.3	70.7	191	34	22	135
September	19.0	11.3	69.7	191	36	22	133
	(This report was discontinued by DOE due to budget reductions)						
1980							
January	18.6	11.7	69.7	178	33	21	124
February	18.8	12.4	68.8	186	35	23	128
March	19.5	11.3	69.2	182	36	20	126
April	19.2	11.9	68.9	190	37	23	131
May	19.0	12.9	68.1	190	36	24	129
June	18.7	12.7	68.6	193	36	25	133
July	18.7	12.5	68.8	197	37	25	136
August	19.4	12.4	68.2	197	38	24	134
September	19.7	11.8	68.5	191	38	23	131
October	19.5	12.0	68.5	190	37	23	130
November	19.3	12.4	68.3	190	37	24	130
December	19.6	10.7	69.7	194	38	21	135
1979							
January	19.0	11.3	69.7	201	38	23	140
February	18.4	11.9	69.7	211	39	25	147
March	19.1	10.8	70.1	204	39	22	143
April	18.8	11.4	69.8	207	39	24	144
May	18.7	11.2	70.1	205	38	23	144
June	18.3	11.3	70.4	211	39	24	148
July	18.8	11.8	69.4	198	37	23	137
August	19.0	11.0	70.0	207	39	23	145
September	18.8	11.6	69.6	188	35	22	131
October	19.3	11.5	69.2	200	39	23	138
November	18.4	12.2	69.4	195	36	24	136
December	19.0	11.5	69.5	188	36	22	131

(a) As defined by Census Bureau, 50% or more of sales revenues from sale of gasoline and oil products; (b) Nine-month totals because DOE discontinued these reports at that time.
Source: Energy Information Administration, Retail Sales of Gasoline.

Average Sales by Retail Outlet by Marketer Type



Data shown are for the month of July in the years indicated.

Average Monthly Sales of Retail Outlets, Gal. per Station (a)

	U.S. Average	Refiner-Marketers	Nonbranded Independent	Branded Independent
Jan. 1975	31,751	54,731	65,744	27,803
Jan. 1976	32,907	63,898	67,692	27,535
Jan. 1977	35,439	64,713	56,744	30,164
Jan. 1978	37,081	69,165	56,000	31,672
Jan. 1979	37,200	79,250	48,951	31,427
Jan. 1980	36,085	77,308	53,750	30,125
Jan. 1981 (b)	36,734	80,231	56,612	30,365
July 1975	35,943	59,606	60,186	32,030
July 1976	37,614	66,392	62,660	32,610
July 1977	40,653	76,048	64,496	34,715
July 1978	40,246	83,227	55,624	34,033
July 1979	37,596	80,595	60,756	31,087
July 1980	38,433	84,173	52,827	32,093
July 1981 (b)	40,309	91,628	57,200	33,621

(a) January data are not comparable to July data because of seasonal variations; (b) DOE discontinued this series in late 1981.
Source: Energy Information Administration, Retail Sales of Gasoline.

Share of Markets

Subtle but significant shifts in market shares over the past decade are apparent in an American Petroleum Institute (API) "discussion paper" spanning 30 years of oil history.

Released just before the new year, the study shows that the major and semi-major oil companies have lost ground to the independents in distribution of gasoline and other products.

There's no need to be concerned about the big companies, however. Even though their hold has eroded somewhat, the top 20 still distribute seven out of every 10 gallons of refined products.

The marketing data are only one segment of a study that was intended to demonstrate statistically the decline in energy industry concentration ratios, especially over the past decade.

The study, entitled "Market Shares and Individual Company Data for U.S. Energy Markets: 1950-1980," was prepared by API's policy analysis department.

A caveat specifies that "the contents of this paper are for the purposes of study and discussion and do not necessarily represent the view of the American Petroleum Institute or any of its members."

The Erosion of Power in Oil Marketing

(Highlights of an American Petroleum Institute study on the decline of oil industry concentration ratios, 1970-1980).

	1980		1975		1970		
	Sales	% of National Market	Sales	% of National Market	Sales	% of National Market	% Decline 1970-1980
Motor Gasoline (Add 000,000 gal.)							
Top 4 Cos.	29,772	28.5%	30,497	29.5%	27,563	30.7%	-2.2%
Top 8	51,564	49.3	52,129	50.3	49,022	54.6	-5.3
Top 15	68,303	65.4	71,032	68.6	67,319	74.9	-9.5
Top 20	74,187	71.0	77,367	74.7	71,915	80.0	-9.0
U.S. Total	**104,491**	—	**103,547**	—	**89,862**	—	—
Refined Products (Add 000,000 gal.)							
Top 4 Cos.	71,852	27.6	77,677	31.0	76,573	34.0	-6.4
Top 8	114,761	46.1	128,343	51.3	139,094	57.3	-11.2
Top 15	169,734	65.1	174,655	69.8	173,950	77.2	-12.1
Top 20	187,670	72.0	191,702	70.6	185,892	82.5	-10.5
U.S. Total	**260,702**	—	**250,216**	—	**225,305**	—	—
Refining Capacity (Add 000 b/d)							
Top 4 Cos.	5,302	29.0	4,519	29.9	4,168	32.5	-3.5
Top 8	8,957	49.0	8,081	53.5	7,365	57.5	-8.5
Top 15	12,242	67.0	11,024	72.9	9,999	78.1	-11.1
Top 20	13,617	74.5	12,116	80.2	10,794	84.3	-9.8
U.S. Total	**18,269**	—	**55,115**	—	**12,811**	—	—
Refinery Crude Runs (Add 000 b/d)							
Top 4 Cos.	4,231	31.4	4,091	32.9	3,719	34.2	-2.8
Top 8	7,323	54.3	7,174	57.7	6,627	61.0	-6.7
Top 15	9,879	75.3	9,878	79.4	9,194	84.6	-9.3
Top 20	10,915	81.0	10,804	86.8	9,901	91.1	-10.1
U.S. Total	**13,483**	—	**12,442**	—	**10,870**	—	—

*Includes Puerto Rico

Special note: Because of the shifts in market shares, the companies in the various categories are not automatically the same year after year.

Source: "Market Shares and Individual Company Data for U.S. Energy Markets: 1950-1980," Discussion Paper #014R, American Petroleum Institute, January, 1982.

Top 11 Marketers: A Seven Year Overview

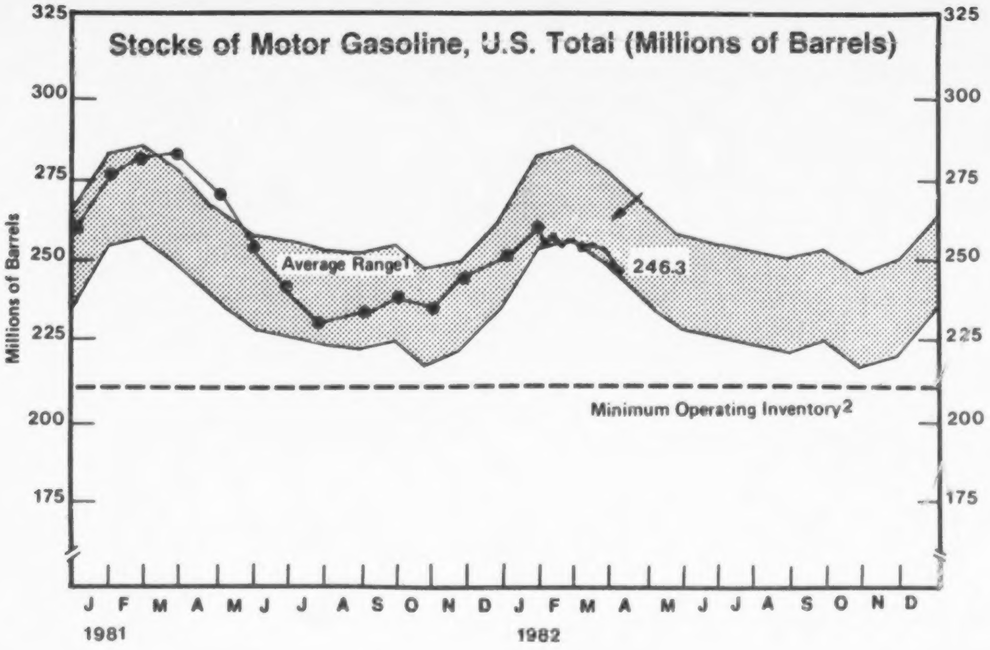
	1981		1980		1979		1978		1977		1976		1975	
	Rank	Share	Rank	Share	Rank	Share	Rank	Share	Rank	Share	Rank	Share	Rank	Share
Amoco	1	7.31	3	7.40	2	7.48	2	7.71	2	7.30	4	7.20	2	7.17
Shell	2	6.92	2	7.44	3	7.30	1	7.70	1	7.53	3	7.36	4	7.00
Exxon	3	6.80	1	7.54	1	7.65	3	7.28	3	7.14	2	7.40	3	7.10
Texaco	4	5.70	5	5.95	5	6.01	4	6.75	4	7.11	1	7.50	1	7.94
Gulf	4	5.70	7	5.39	4	6.36	5	5.83	5	5.91	5	6.11	5	6.27
Mobil	6	5.33	4	6.01	6	5.78	6	5.55	6	5.59	6	5.78	6	6.02
Chevron	7	5.19	6	5.77	7	5.30	7	4.76	7	4.75	7	4.70	7	4.58
Atlantic Richfield	8	3.84	8	3.87	8	3.89	8	3.79	8	3.85	8	4.00	8	3.96
Union	9	3.33	9	3.50	9	3.49	9	3.28	11	3.08	11	3.24	11	3.18
Phillips	10	2.90	10	2.83	11	2.85	11	3.02	10	3.15	10	3.43	9	3.93
Sun	11	2.53	11	2.74	10	3.01	10	3.20	9	3.39	9	3.49	10	3.49

Source: Lundberg Letters and NPN Factbooks.

Amoco became the No. 1 gasoline marketer in 1981, jumping from third to first place and displacing Exxon, which had been ruler of the roost for two successive years, according to Lundberg Letter, which keeps a running tab on marketplace developments.

Shell, which has been the leader in 1978 and 1977, remained in second place in 1981. Exxon dropped to third. Gulf, which had been coming on strong but slipped badly in 1980, resumed its upward surge in 1981 and wound up in a virtual tie with Texaco, whose base position has been eroding for years.

An interesting sidelight of the marketing data compiled by Lundberg emphasizes how the majors' hold on market shares continues to deteriorate. As recently as 1977, at least four majors held shares over the 7% mark. This dropped to three majors in 1978 through 1980, and to one in 1971—Amoco. *(See table above).*

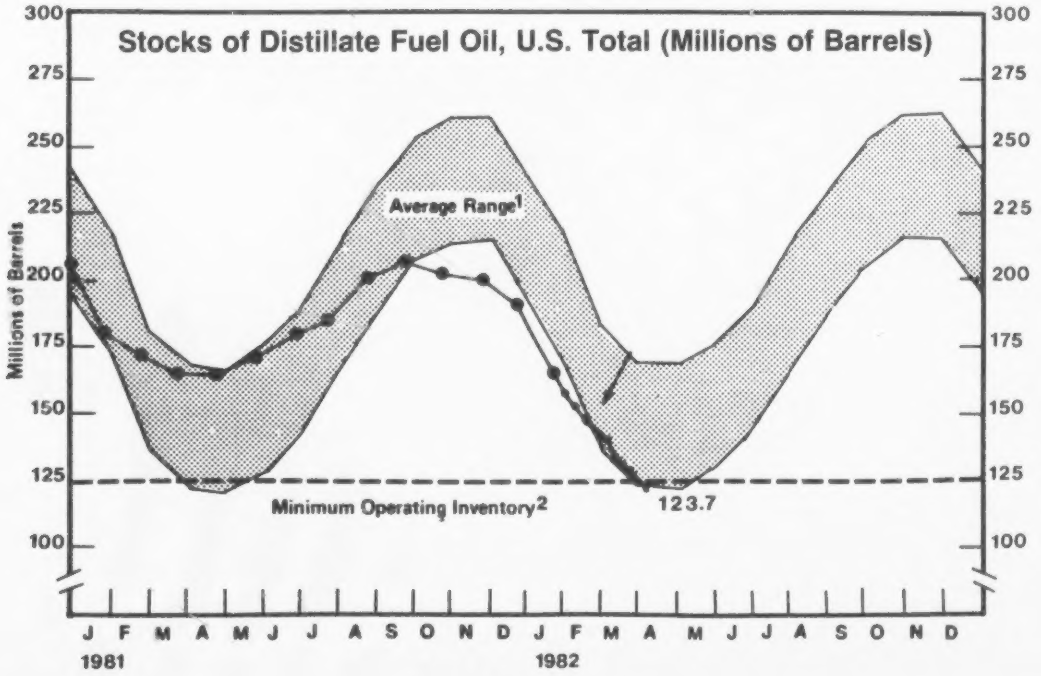

Stocks of Motor Gasoline, U.S. Total (Millions of Barrels)

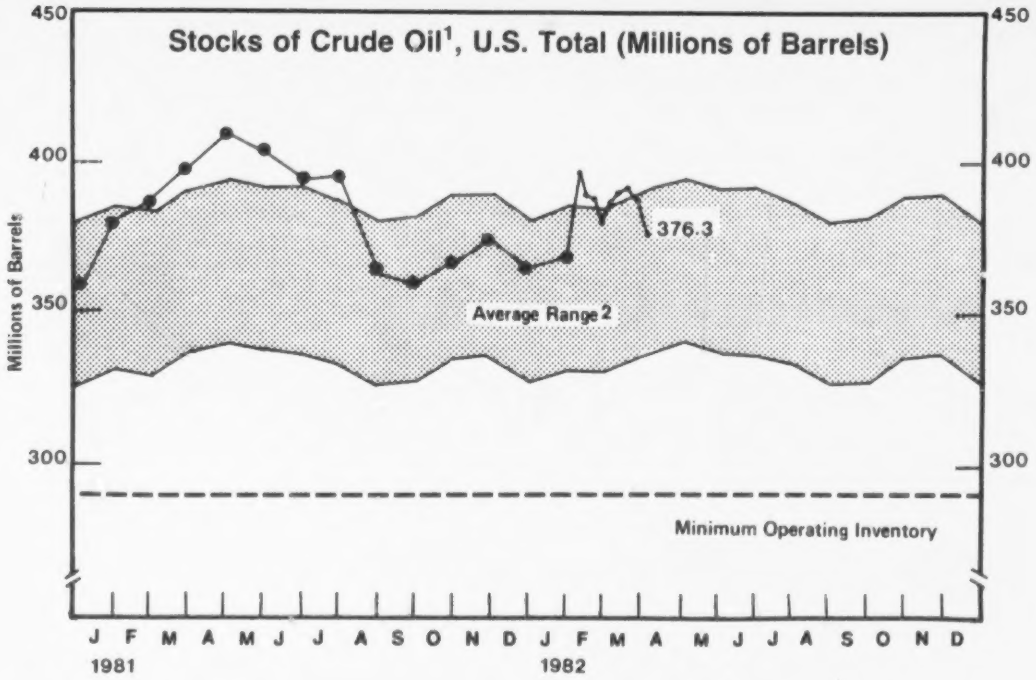
Product stocks at the Primary Level include those held at refineries, in pipelines, and at major bulk terminals. They do no include stocks held in secondary distribution facilities such as jobber tanks, consumer tanks, and/or barges designed for consumer markets.

(1) The average level and width of average range are based on three years of monthly data for the period of January 1977, through December 1979. The seasonal pattern is based on seven years of monthly data for the period of January 1973 through December 1979.

(2) National Petroleum Council defines the Minimum Operating Inventory as the minimum level required for routine operation. By its definition, runouts and shortages could occur if inventory levels fall below that level for any extended period of time. See NPC's full report, issued in December 1979 for complete details on primary and secondary storage.

Source: Department of Energy, Weekly Statistical Reports, April, 1982.


Stocks of Distillate Fuel Oil, U.S. Total (Millions of Barrels)



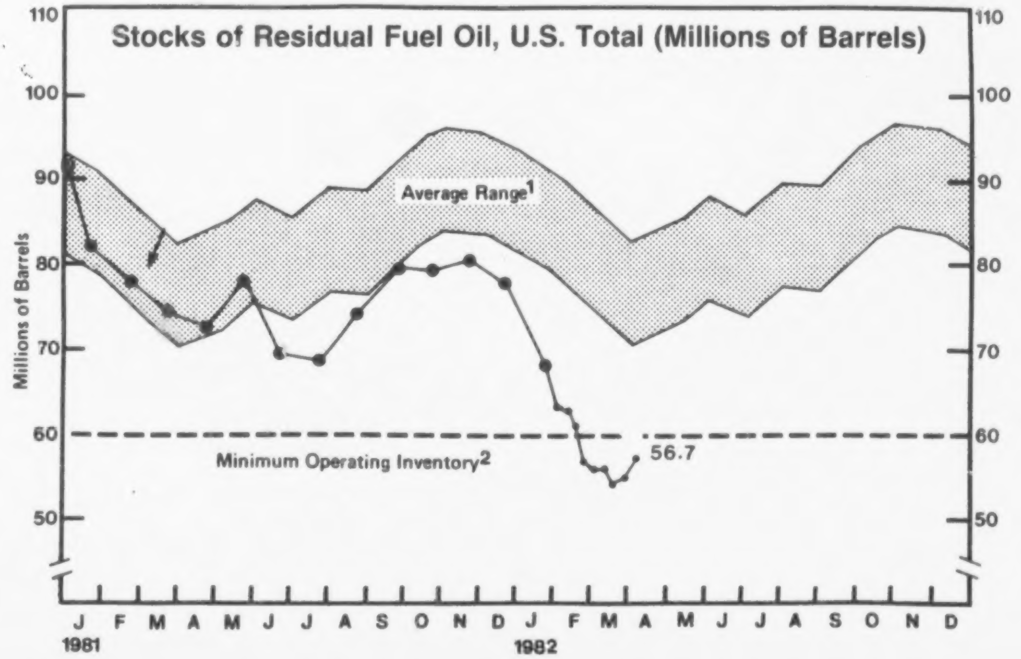
Stocks of Crude Oil[1], U.S. Total (Millions of Barrels)

Crude Stocks at Primary Levels include those held at refineries, in pipelines, and in lease tanks, but do not include those held in the Strategic Petroleum Reserve operated by the U.S. Government.

(1) The average level and width of average range are based on three years of monthly data for the period of January 1977, through December 1979. The seasonal pattern is based on seven years of monthly data for the period of January 1973 through December 1979.

(2) National Petroleum Council defines the Minimum Operating Inventory as the minimum level required for routine operation. By its definition, runouts and shortages could occur if inventory levels fall below that level for any extended period of time. See NPN's full report, issued in December 1979 for complete details on primary and secondary storage.

Source: Department of Energy, Weekly Statistical Report, April, 1982.



Stocks of Residual Fuel Oil, U.S. Total (Millions of Barrels)

Crude and Product Stocks at Primary Levels (a)

(Add 000,000 bbl.)

1981	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Crude Oil	381.5	386.8	397.2	407.2	402.3	392.2	392.5	365.2	361.4	369.5	372.3	368.5
Gasoline	276.5	284.1	284.9	271.8	258.2	241.7	227.1	232.5	237.0	235.0	247.4	251.4
Jet Fuel	39.5	38.7	39.2	40.7	44.7	45.4	44.9	44.9	43.3	42.8	41.9	40.5
Kerosine	10.5	10.4	11.0	11.9	12.6	13.2	13.2	13.6	13.8	12.5	12.4	11.1
Distillate	180.0	172.5	164.6	164.6	171.9	180.2	186.7	200.3	206.8	201.1	200.0	190.2
Residual	82.3	78.2	74.9	73.0	78.5	70.1	69.3	74.8	80.0	79.8	80.8	78.3
Unfin. Oil	121.4	122.2	126.0	126.4	126.2	126.1	126.1	124.5	118.5	119.2	116.4	112.0
Other Oils	191.7	188.7	186.8	193.6	202.5	206.0	210.8	217.8	220.6	213.5	212.3	206.2
Total	**1,283.4**	**1,281.5**	**1,284.7**	**1,289.2**	**1,296.9**	**1,274.9**	**1,270.7**	**1,273.6**	**1,281.4**	**1,273.5**	**1,283.6**	**1,258.2**

(a) Crude stocks include oil in transit to refiners but not Strategic Petroleum Reserve. Product stocks include those held in pipelines, at refineries, and at major bulk plants.

Motor Gasoline Stocks by PAD Regions

(Add 000,000 bbl.)

1981	East Coast	Midwest	Gulf Coast	Rocky Mtn.	West Coast
Jan.	71.7	86.4	77.6	9.7	31.5
Feb.	74.2	90.5	79.6	10.3	29.5
Mar.	79.4	89.7	78.6	10.2	26.9
Apr.	77.6	84.2	76.3	9.4	24.4
May	72.9	80.1	72.3	8.6	24.3
June	69.4	72.4	66.1	7.4	26.4
July	62.3	65.8	63.9	6.5	28.6
Aug.	63.8	66.5	68.6	6.0	27.7
Sept.	69.5	65.3	68.4	5.9	28.0
Oct.	69.3	65.8	64.7	6.3	28.8
Nov.	69.7	69.1	70.0	7.7	30.9
Dec.	69.3	72.6	69.6	8.5	31.4

(Add 000,000 bbl.)

1980	East Coast	Midwest	Gulf Coast	Rocky Mtn.	West Coast
Jan.	70.2	83.1	69.8	8.8	30.3
Feb.	75.0	85.0	73.7	9.3	31.4
Mar.	73.3	89.0	80.9	9.7	29.4
Apr.	74.8	83.3	75.7	9.4	28.6
May	75.2	76.9	74.3	8.9	27.8
June	76.4	79.1	73.2	8.4	27.9
July	72.9	78.9	73.2	6.6	29.1
Aug.	72.8	76.8	71.4	6.5	30.2
Sept.	75.7	77.5	68.3	6.2	30.5
Oct.	69.9	70.9	69.8	6.6	29.2
Nov.	69.2	72.8	75.8	7.8	31.6
Dec.	71.1	76.9	73.8	8.6	31.0

Distillate Stocks by PAD Regions

(Add 000,000 bbl.)

1981	East Coast	Midwest	Gulf Coast	Rocky Mtn.	West Coast
Jan.	72.2	57.9	34.1	3.4	12.4
Feb.	69.7	56.1	32.4	3.3	11.1
Mar.	64.9	52.5	32.5	3.3	11.4
Apr.	64.4	52.4	34.7	2.9	10.3
May	68.2	50.6	39.2	3.2	10.6
June	73.6	48.8	43.2	3.4	11.1
July	81.7	49.8	40.8	3.7	10.8
Aug.	86.3	54.3	44.6	3.8	11.3
Sept.	92.0	54.3	44.8	3.6	12.0
Oct.	94.9	50.9	40.0	3.3	12.0
Nov.	95.8	51.8	36.8	3.6	12.0
Dec.	87.7	49.6	35.4	3.9	13.5

(Add 000,000 bbl.)

1980	East Coast	Midwest	Gulf Coast	Rocky Mtn.	West Coast
Jan.	92.1	65.5	38.7	3.5	12.6
Feb.	77.9	61.1	36.1	3.7	12.8
Mar.	67.1	57.3	36.8	3.9	12.8
Apr.	71.4	55.7	33.5	3.9	12.8
May	78.0	54.3	34.7	3.8	12.6
June	85.8	56.8	38.4	3.5	12.1
July	96.0	60.2	41.2	3.9	12.6
Aug.	104.1	62.4	42.9	3.9	13.0
Sept.	108.2	62.6	45.5	3.6	12.4
Oct.	106.5	57.4	46.1	3.3	12.3
Nov.	103.3	58.2	44.2	3.3	13.4
Dec.	90.3	58.5	39.8	3.4	13.1

Residual Stocks by PAD Regions

(Add 000,000 bbl.)

1981	East Coast	Midwest	Gulf Coast	Rocky Mtn.	West Coast
Jan.	38.7	9.2	22.2	0.8	11.4
Feb.	38.5	9.2	19.7	0.7	10.1
Mar.	37.4	7.9	19.4	0.6	9.7
Apr.	36.5	7.2	19.1	0.5	9.7
May	38.5	7.5	21.5	0.6	10.5
June	33.7	7.0	17.4	0.6	11.3
July	32.9	7.7	17.7	0.5	10.4
Aug.	34.3	8.2	21.0	0.6	10.7
Sept.	40.0	8.5	20.4	0.7	10.5
Oct.	40.4	7.8	20.4	0.7	10.4
Nov.	43.0	8.1	19.4	0.7	9.6
Dec.	40.6	8.3	18.9	0.7	9.9

(Add 000,000 bbl.)

1980	East Coast	Midwest	Gulf Coast	Rocky Mtn.	West Coast
Jan.	49.0	12.7	22.1	1.0	12.4
Feb.	42.6	12.5	22.7	1.0	12.1
Mar.	43.0	12.0	19.5	0.9	12.8
Apr.	43.8	10.7	17.3	0.9	12.5
May	43.4	10.8	20.1	0.8	12.6
June	45.1	10.9	18.9	0.8	12.0
July	44.0	9.8	19.4	0.9	11.6
Aug.	43.6	9.3	21.0	0.9	12.0
Sept.	43.8	8.9	22.3	0.9	12.0
Oct.	45.9	9.0	23.0	0.8	12.3
Nov.	46.5	8.6	25.2	0.9	12.1
Dec.	45.4	9.1	23.8	0.8	12.6

Source: For all tables on this page—Department of Energy, Weekly Petroleum Status Report.

U.S. Estimated Petroleum Balance (Add 000 b/d)

	Full year			4th Quarter		3rd Quarter		2nd Quarter	
Supply Deliveries From Primary Storage	1981	1980	%Chng.	1981	%Chng. 1980	1981	%Chng. vs. 1980	1981	%Chng. vs. 1980
Products Supplied:									
Motor Gasoline	6,594	6,882	(4.2)	6,597	(3.2)	6,801	(1.4)	6,619	(5.1)
Unleaded Motor Gasoline (a)	3,453	3,111	11.0	3,474	5.2	3,581	13.1	3,490	14.9
Naptha-jet	199	217	(8.3)	182	(16.5)	232	6.9	221	2.3
Kerosine-jet	814	852	(4.5)	804	(3.4)	806	(5.4)	778	(7.6)
Kerosine	126	159	(20.8)	154	(8.3)	90	(29.7)	107	(13.7)
Distillate Fuel Oil	2,830	2,968	(4.6)	2,983	(9.0)	2,494	4.0	2,485	(2.9)
Residual Fuel Oil	2,040	2,547	(19.9)	1,910	(24.4)	2,036	13.5	1,894	(20.6)
All Other Oils	3,671	3,856	(4.8)	3,565	(10.4)	3,730	2.6	3,614	(1.7)
Reclassified	−312	−460	(32.2)	−305	(35.7)	−275	(30.4)	−276	(32.4)
Total Domestic Deliveries	15,962	17,021	(6.2)	15,890	(8.4)	15,914	(1.1)	15,442	(5.7)
Exports	576	542	6.3	626	6.1	551	17.7	519	(7.7)
Total Products Supplied	**16,538**	**17,563**	**(5.8)**	**16,516**	**(7.9)**	**16,465**	**(0.5)**	**15,961**	**(5.7)**
Supply:									
Domestic Production:									
Crude Oil (b)	8,572	8,597	(0.3)	8,613	0.8	8,635	1.2	8,598	(0.3)
Natural Gas Liquids	1,581	1,564	1.1	1,601	3.9	1,582	4.6	1,561	(1.2)
Other Supply	496	715	(30.6)	619	(18.4)	609	(23.4)	587	(13.2)
Total Domestic Supply	10,649	10,876	(2.1)	10,833	(0.1)	10,826	(0.1)	10,746	(1.2)
Imports:									
Crude Oil, Total	4,182	5,177	(19.2)	3,902	(16.1)	3,993	(14.6)	4,069	(24.2)
Canadian	160	200	(20.0)	169	(6.1)	136	(18.6)	127	(38.0)
Other	4,022	4,977	(19.2)	3,733	(16.5)	3,857	(14.4)	3,938	(23.7)
Products, Total	1,543	1,611	(4.2)	1,525	(11.0)	1,484	4.7	1,320	(8.3)
Residual Fuel Oil	799	920	(13.2)	858	(11.8)	814	(4.8)	635	(13.3)
Other	744	691	(7.7)	667	(10.0)	670	19.0	685	3.3
Total Imports	5,725	6,788	(15.7)	5,427	(14.7)	5,477	(10.1)	5,385	(20.9)
Total Supply	**16,374**	**17,664**	**(7.3)**	**16,260**	**(5.5)**	**16,303**	**(3.7)**	**16,131**	**(8.8)**

(a) Included in motor gasoline total; (b) Includes lease condensate. Special notes: All 1981 data are preliminary. Also in Products Supplied, Department of Energy began using a new data collection system in 1981 dealing with reclassified products. These are deducted from domestic supplies to eliminate double counting.
Source: American Petroleum Institute, Monthly Statistical Reports.

Refinery Operations (Add 000 b/d)

	Full Year			4th Quarter		3rd Quarter		2nd Quarter	
Refinery Operations:	1981	1980	%Chng.	1981	%Chng. vs. 1980	1981	%Chng. vs. 1980	1981	%Chng. vs. 1980
Input to Crude Oil Distillation Units	12,748	13,794	(7.6)	12,531	(7.0)	12,911	(4.4)	12,692	(8.2)
Operable Capacity	18,565	18,245	1.8	18,230	(1.0)	18,756	2.3	18,676	2.3
Refinery Utilization (%)	68.7%	75.6%	(9.1)	68.7%	(6.1)	68.8%	(6.6)	68.0%	(10.3)
Crude Oil Runs	12,485	13,483	(7.4)	12,265	(7.0)	12,663	(4.0)	12,418	(8.0)

Source: American Petroleum Institute, Monthly Statement Reports.

Crude and Product Inventories (As of 12/31) (Add 000)

	Full Year			4th Quarter		3rd Quarter		2nd Quarter	
Stocks	1981	1980	%Chng.	1981	%Chng. vs. 1980	1981	%Chng. vs. 1980	1981	%Chng. vs. 1980
Crude Oil	366.0	380.2	(3.7)	366.0	(3.7)	366.4	(2.6)	401.8	5.2
Unfinished Oils	109.6	123.7	(11.4)	109.6	(11.4)	118.5	(10.3)	127.8	(4.0)
Motor Gasoline	252.5	263.0	(4.0)	252.5	(4.0)	239.7	(7.2)	243.5	(8.0)
Naptha-jet	7.1	6.4	10.9	7.1	10.9	6.0	(9.1)	6.2	5.1
Kerosine-jet	32.4	35.9	(9.7)	32.4	(9.7)	36.5	2.8	37.3	2.8
Kerosine	11.0	11.4	(3.5)	11.0	(3.5)	13.6	5.4	13.1	(5.8)
Distillate Fuel Oil	190.2	205.4	(7.4)	190.2	(7.4)	210.2	(9.5)	178.2	(9.0)
Residual Fuel Oil	81.0	91.5	(11.5)	81.0	(11.5)	74.4	(15.4)	75.4	(14.0)
All other oils	207.6	199.9	3.9	207.6	3.9	182.2	(14.0)	226.4	13.3
Total, All Oils	**1,257.4**	**1,317.4**	**(4.6)**	**1,257.4**	**(4.6)**	**1,247.7**	**(7.8)**	**1,309.7**	**(0.7)**

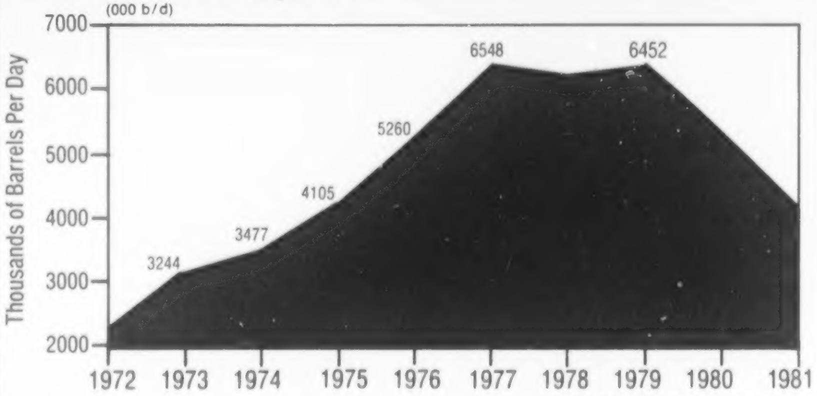
Source: American Petroleum Institute, Monthly Statement Reports.

Domestic Supply Trend (Add 000,000 bbl.)

Year	All products	Gasoline	Kerosine (a)	Distillate	Residual	LPG	Lubes	Other
1981 (b)	6,296	2,427		1,168	807	410	56	1,041
1980	6,932	2,536	397	1,389	1,033	414	58	1,105
1979	6,758	2,568	388	1,210	1,032	456	66	1,038
1978	6,879	2,705	377	1,253	1,103	358	63	1,020
1977	6,710	2,633	350	1,223	1,121	369	58	956
1976	6,391	2,567	351	1,147	1,025	381	56	864
1975	5,958	2,436	347	1,041	899	362	50	823
1974	6,078	2,386	346	1,075	963	388	57	862
1973	6,317	2,453	386	1,124	1,030	404	59	851
1972	5,990	2,351	380	1,066	926	414	53	800
1971	5,552	2,213	385	971	838	369	49	727
1970	5,364	2,131	358	927	804	363	50	731
1969	5,159	2,042	354	900	722	373	49	720
1968	4,902	1,956	326	875	668	331	48	698
1967	4,584	1,843	289	818	652	344	44	594
1966	4,411	1,793	244	797	626	324	49	578
1965	4,202	1,720	220	776	587	307	47	545
1960	3,610	1,512	132	685	559	227	43	427

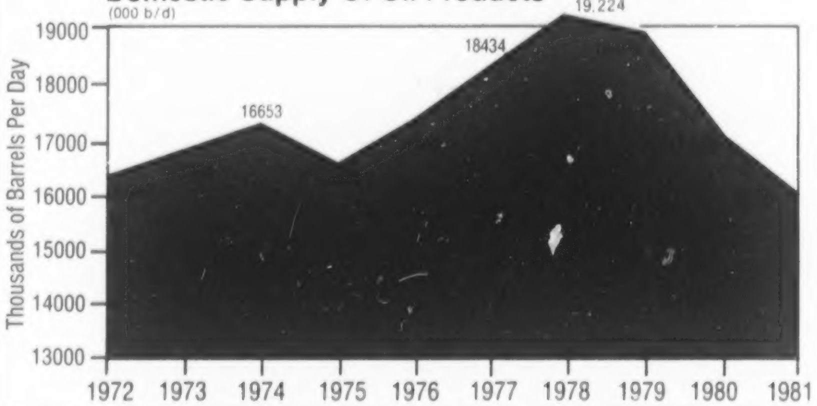
(a) Kerosine includes jet fuel; (b) Preliminary.
Source: Department of Energy, Energy Data Reports.
Figures for 1963 and thereafter are not strictly comparable to earlier years because of product reclassification resulting from separately reporting data for petrochemical feedstocks.

Crude Oil Imports



Source: Department of Energy

Domestic Supply Of Oil Products



Consumer resistance to higher prices and a determined conservation ethic, coupled with high interest rates, inflation and an economic recession, particularly in the last quarter of the year, caused a continuation of the downward sweep in oil production and consumption that started in 1980.

In some ways, the slump was healthy for the American people. It reduced U.S. dependence on foreign oil tremendously with crude imports, for example, down 20% in 1981 and 37.5% below the peak years of 1977 and 1978.

But while imports declined, so did supplies which are roughly tantemount to consumption. Supplies slumped 6.2% in 1981. The gasoline and fuel oil markets were more than sated throughout the entire year, causing an erosion of prices and margins as marketers fought bitterly for customers and gallonage.

The soft markets led to predictions that $1 a gal. regular grade gasoline would be available over most of the U.S. by the time summer driving season got underway. There was some hope—but not much conviction—that prices would firm up in the last half of the year.

A Department of Energy projection in the forepart of 1982 indicated that consumption would decline slightly for the year as a whole but would rise about 5% in 1983. That can only mean tight markets and stiff competition in 1982.

Supply and Production, Principal Products

(Add 000 bbl.)

	Motor Gasoline	Aviation Gasoline	Distillate Fuel Oil	Residual Fuel Oil	Jet Fuel (a)	Lubricants	Asphalt
Domestic Supply							
1981	2,403,890	11,147	1,032,950	752,630	368,850	58,348	124,751
1980	2,401,335	13,088	1,046,090	915,420	389,820	58,400	147,515
Production							
1981	2,337,460	11,540	954,840	480,340	353,320	60,575	124,153
1980	2,369,580	12,923	971,265	576,700	364,635	65,158	144,052
Imports							
1981	62,780	0	60,955	290,540	13,870	3,069	1,427
1980	51,100	0	51,830	342,735	21,900	2,591	1,452

(a) Includes naphtha and kerosene-based jet fuels

Source: Department of Energy: Monthly Energy Review, March 1981

U.S. Oil Imports (a)

(Add 000 b/d)

Year	Crude Oil	Other Products	Residual Fuel Oil	Total Imports	% of Total Domestic Production
1981 (b)	4,150	740	800	5,690	66.4%
1980	5,219	690	920	6,829	79.4
1979	6,452	786	1,151	8,389	76.9

(a) Does not include Strategic Petroleum Reserve. (b) Preliminary
Source: Department of Energy, Monthly Energy Review and IPAA

Origins of U.S. Oil Imports

(Add 000 b/d)

	Western Hemisphere			Eastern Hemisphere		
Year	Canada	Venezuela	Other	Mid-East	Africa	Other
1981	410	375	1,285	1,135	1,455	1,065
1980	435	460	1,631	1,565	2,915	781
1979	533	691	1,610	2,120	2,520	918

Source: Independent Petroleum Assn. of America

	Total Well Completions			Proved Reserves				Supply (Add 000 b/d)	
Year	Total (a)	Dry	% Dry	Crude Oil (b)	Crude Production/ Reserve Ratio	Natural Gas (c)	Natural Gas Production/ Reserve Ratio	Domestic Crude Production	Crude & Product Imports
1981 (d)	80,450	22,945	28.5%	NA	NA	NA	NA	8,565	5,725
1980	62,462	18,089	28.9	29,805	NA	199.0	NA	8,597	6,787
1979	51,263	15,752	30.7	27,051	9.1	194.9	9.8	8,552	8,389

(a) Includes oil, gas, service and dry completions; (b) Millions of bbl.; (c) Trillions of cubic feet. (d) Preliminary

Source: Independent Petroleum Assn. of America and Department of Energy

Supply/Demand Forecast for 1982

Independent Petroleum Assn. of America, in a revised forecast issued in the spring of 1982, anticipates another hefty decrease in oil demand before the year is out. The spring projection downgraded a slightly more optimistic forecast made in the fall of 1981 by its Supply and Demand Committee.

Here are highlights of IPAA's 1982 projections:

- Energy consumption will decline for the third consecutive year.
- Domestic oil demand will fall another 600,000 b/d to an average of 15.4-million b/d. This is in the wake of a drop of more than 1-million b/d in 1981.
- Demand for all major products will slip further in 1982 but at a more modest rate than in 1981.
- Oil imports will average 5.0-million b/d, down more than 700,000 b/d vis a vis 1981.
- Refinery utilization will continue to erode, averaging 12.0-million b/d versus the 1981 average of 12.4-million b/d.
- Crude oil production is expected to rise slightly.

Commenting on its domestic oil demand expectations, IPAA said: "The combined factors of a sluggish economy, the cumulative impact of previous large scale price increases, and the displacement by alternative fuels will continue to depress oil demand for the full year 1982."

As for gasoline, IPAA said: "Although demand was adversely affected by severe weather conditions in the first quarter, consumption is expected to strengthen throughout the remainder of the year. However, diesel penetration and increased mileage efficiency will keep consumption below last year's level."

Last winter's colder weather might normally have boosted fuel oil consumption but continued conservation and substitution by other fuels will more than offset such gains in 1982.

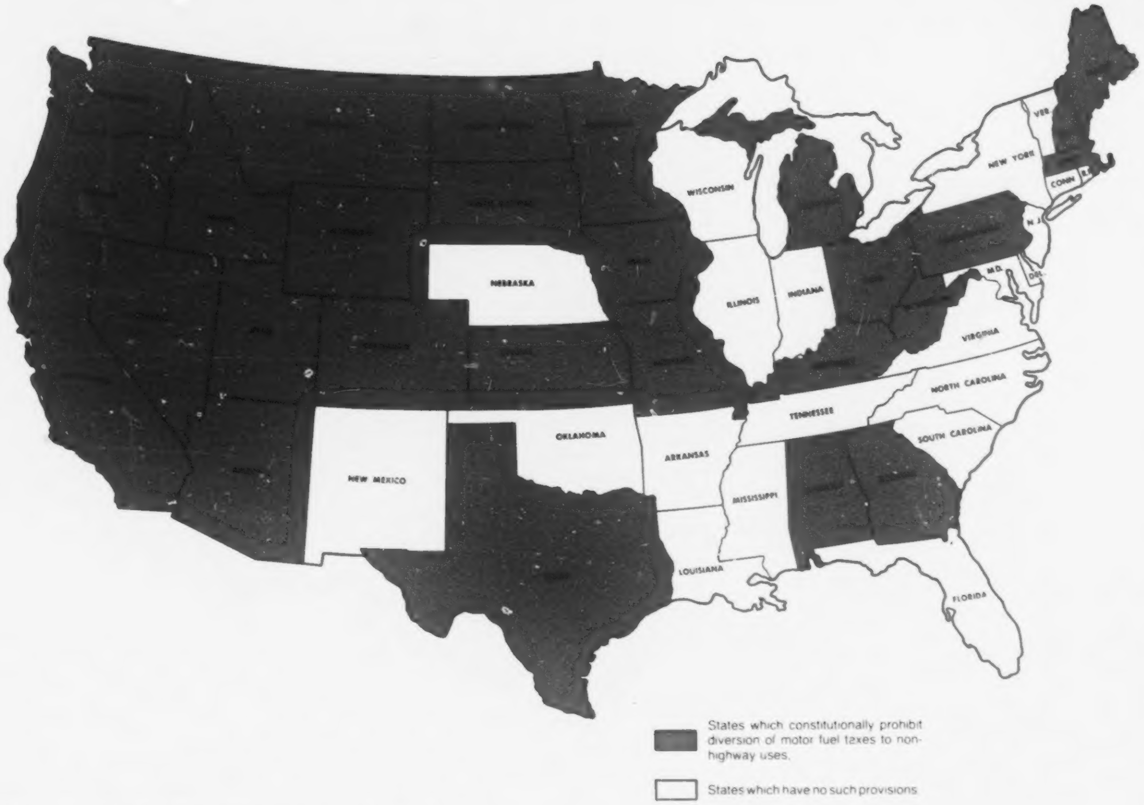
The Outlook: Not Bleak But Not Rosy

(Add 000 b/d)

	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	Year
Domestic Product Demand:					
Motor Gasoline	6,098	6,563	6,627	6,505	6,450
Aviation Fuels	1,033	986	1,033	1,005	1,014
Middle Distillates	3,326	2,489	2,459	3,132	2,850
Residual Fuel Oil	2,149	1,767	1,804	1,963	1,920
Liquified Gases	1,677	1,247	1,234	1,602	1,439
Other Products	1,481	1,812	1,946	1,719	1,742
Total	**15,764**	**14,864**	**15,103**	**15,926**	**15,415**
Exports:	731	579	569	588	616
Total Demand:	**16,495**	**15,443**	**15,672**	**16,514**	**16,031**
Stock Change All Oils:	**−983**	**+229**	**+92**	**−163**	**−203**
Total Supply					
Domestic Production:					
Crude Oil	8,650	8,650	8,650	8,650	8,650
Natural Gas Liquids	1,548	1,539	1,534	1,564	1,546
Total	**10,198**	**10,189**	**10,184**	**10,214**	**10,196**
Required Imports:					
Crude Oil (a)	3,241	3,440	3,758	3,765	3,553
Motor Gasoline	153	162	165	156	159
Aviation Fuels	22	39	44	38	36
Middle Distillates	107	135	159	163	141
Residual Fuel Oil	827	631	714	772	736
Liquified Gases	276	164	152	215	202
Other Products	198	172	186	178	183
Total	**4,824**	**4,743**	**5,178**	**5,287**	**5,010**
Other Supply	490	740	402	850	622
Total Supply:	**15,512**	**15,672**	**15,764**	**16,351**	**15,828**
Closing Stocks:					
(Million Barrels)					
Motor Gasoline	249.4	235.0	233.0	230.0	230.0
Aviation Fuels	43.7	44.0	38.0	35.0	35.0
Middle Distillates	134.9	164.0	185.0	189.0	189.0
Residual Fuel Oil	56.8	53.0	53.0	57.0	57.0
Liquified Gases	120.3	142.0	155.0	137.0	137.0
Other Products	54.3	57.0	52.0	54.0	54.0
Total Products	**659.4**	**695.0**	**716.0**	**702.0**	**702.0**
Unfinished Oils	114.7	110.0	112.0	115.5	115.5
Natural Gas Liquids	14.9	15.5	16.0	16.5	16.5
Crude Oil (a)	380.7	370.0	355.0	350.0	350.0
Total All Oils:	**1,169.7**	**1,190.5**	**1,199.0**	**1,184.0**	**1,184.0**
Crude Runs to Stills:	**11,409**	**12,130**	**12,148**	**12,481**	**12,045**

(a) Excludes imports for and stocks in U.S. Strategic Storage.

Source: Independent Petroleum Assn. of America, Supply & Demand Forecast, May, 1982.



State Tax Collections — 1981

State	Gasoline tax rates per gal. (a) 12/31/81	Total state motor fuel tax revenues (Add 000) 1981(b)	1980	% Change
Alabama	11.0¢	$2,126,341	$2,206,933	-3.7%
Alaska	8.0	180,049	181,368	-0.7
Arizona	8.0	1,446,963	1,510,862	-4.2
Arkansas	9.5	1,303,034	1,341,523	-2.9
California	7.0	11,330,390	11,898,945	-4.8
Colorado	9.0	1,528,776	1,575,052	-2.9
Connecticut	11.0	1,327,964	1,386,526	-4.2
Delaware	11.0	305,283	316,975	-3.8
Dist. of Columbia	11.0	175,291	183,236	-4.4
Florida	8.0	4,838,540	5,116,312	-5.4
Georgia	7.5	3,086,487	3,241,344	-4.8
Hawaii	8.5	345,733	323,943	6.8
Idaho	11.5	504,578	497,027	1.4
Illinois	7.5	5,102,930	5,097,283	0.1
Indiana	10.5	3,054,646	3,114,800	-1.9
Iowa	13.0	1,714,616	1,659,494	3.4
Kansas	8.0	1,443,548	1,441,541	0.2
Kentucky	9.0	1,867,177	1,946,370	-4.1
Louisiana	8.0	2,211,334	2,301,738	-3.9
Maine	9.0	532,013	556,030	-4.3
Maryland	9.0	1,957,794	2,045,297	-4.3
Massachusetts	9.8	2,291,485	2,383,588	-3.9
Michigan	11.0	4,108,255	4,394,324	-6.5
Minnesota	13.0	2,139,238	2,157,856	-0.9
Mississippi	9.0	1,317,197	1,351,940	-2.6
Missouri	7.0	2,763,325	2,796,780	-1.2
Montana	9.0	523,232	515,126	1.6
Nebraska	13.6	950,508	898,214	5.8
Nevada	10.5	533,054	549,548	-3.1
New Hampshire	14.0	407,339	425,986	-4.5
New Jersey	8.0	3,348,705	3,440,820	-2.6
New Mexico	9.0	843,962	888,188	-5.1
New York	8.0	5,569,766	5,692,735	-2.2
North Carolina	12.5	3,086,132	3,165,685	-2.5
North Dakota	8.0	455,518	403,588	12.6
Ohio	10.3	5,368,283	5,427,886	-1.1
Oklahoma	6.5	2,013,945	1,977,639	1.8
Oregon	8.0	1,471,538	1,515,296	-2.9
Pennsylvania	11.0	5,070,441	5,318,187	-4.7
Rhode Island	12.0	380,232	381,269	-0.3
South Carolina	13.0	1,674,770	1,735,033	-3.5
South Dakota	13.0	463,754	424,224	9.4
Tennessee	9.0¢	2,623,250	2,713,802	-3.3%
Texas	5.0	8,735,415	8,823,385	-1.0
Utah	11.0	788,209	767,608	2.6
Vermont	11.0	249,987	260,437	-3.8
Virginia	11.0	2,717,465	2,827,581	-3.9
Washington	13.5	1,970,632	2,034,750	-3.1
West Virginia	10.5	903,712	952,838	-5.1
Wisconsin	13.0	2,314,361	2,353,821	-1.7
Wyoming	8.0	438,071	438,941	-0.2
Total		**$111,904,998**	**$114,959,854**	**-2.7%**

(a) Tax rate for highway use: does not include federal or local taxes. (b) Preliminary.
Source: Federal Highway Administration, Table 5580-2, October 1981, Issued April, 1982

Federal Collections (Add 000)

Year	Gasoline (a)	Diesel and special fuels (a)	Lube oil (b)	Total
1981 (c)	$4,047,114	$560,973	$101,222	$4,709,309
1980	4,019,481	518,352	78,835	4,616,668
1980	3,897,059	522,554	76,901	4,496,514
1979	4,282,919	508,595	82,335	4,873,849
1978	4,381,950	488,064	79,047	4,949,061
1977	4,229,721	452,631	78,830	4,761,182
1976	4,140,924	408,560	70,135	4,619,619
1975	3,884,483	362,675	66,124	4,313,282
1974	3,854,505	373,302	78,155	4,305,962
1973	3,958,682	358,120	86,266	4,403,068
1972	3,736,545	321,551	85,841	4,143,937
1971	3,513,927	275,159	67,130	3,856,216
1970	3,408,505	264,815	65,862	3,739,182
1969	3,172,243	240,650	86,338	3,499,231

(a) 4¢ gal.; (b) 6¢ gal.; (c) Figures for 1981 are fiscal year gross collections that went to the Highway Trust Fund, since net IRS calendar year information was not available. All other figures represent calendar year net collections after refunds and include the taxes the federal government pays on its own purchases.
Source: U.S. Department of Transportation, Federal Highway Administration.

Outlook for Tires and Batteries at Stations

Year	Replacement passenger tire shipments: Total (in millions)	Station sales (a) (in millions)	Average per station (a)	Replacement automotive-type battery shipments: Total (in millions)	Station sales (a) (in millions)	Average per station (a)
1981	125	25.0	164	53.6	16.1	106
1980	107	21.4	135	50.0	15.0	95
1979	122	24.4	148	53.7	16.1	102
1978	135	27.0	157	56.3	16.9	102
1977	130	26.0	148	54.6	16.4	95
1976	123	24.6	132	49.2	14.8	84
1975	125	23.7	125	42.6	12.7	67
1974	124	24.8	127	44.4	13.3	68
1973	142	28.4	130	43.5	13.1	60
1972	140	28.0	127	43.2	13.0	59
1971	135	27.0	123	39.1	11.7	53
1970	130	26.0	118	37.9	11.4	51
1969	129	25.8	117	35.5	10.7	48
1968	121	24.2	110	33.8	10.1	46

(a) Estimates based on service stations holding 20% of the replacement market, and 30% of the replacement battery market; (b) In 1977, Rubber Manufacturers Assn. changed its base and eliminated motorcycle tires from the passenger tire shipments; all data, including that of 1976, have been restated to reflect this change; in addition, service-station totals have been revised to reflect a population of 184,400 in 1976; 176,465 in 1977; 172,230 in 1978; 164,752 in 1979; 157,997 in 1980; and 156,000 in 1981—all estimates from 1978 on. Tire and battery totals otherwise from Rubber Manufacturers Assn. and Battery Council International.

Battery Shipments Move Up Again

Battery shipments (replacement and original equipment) rose in 1981 for the first time in three years, according to Battery Council International and Motor Vehicle Manufacturers Assn. Total shipments were up 7.06%, with all of it coming from the replacement market. Original equipment installations were slightly below the 1980 level.

(Add 000)

Year	Replacements	% of Market	New cars & trucks	% of Market	Total market	% Change from previous year
1981	53,598	87.1%	7,956	12.9%	61,554	6.0%
1980	50,063	86.2	8,009	13.8	58,072	−11.0
1979	53,746	82.4	11,480	17.6	65,226	−6.2
1978	56,389	81.4	12,910	18.6	69,299	3.0
1977	54,601	81.2	12,639	18.8	67,240	10.8
1976	49,202	81.0	11,477	19.0	60,679	17.6
1975	42,582	82.5	8,985	17.6	51,567	−5.3
1974	44,408	81.5	10,058	18.5	54,466	−2.9
1973	43,453	77.5	12,637	22.5	56,090	2.9
1972	43,220	79.3	11,271	20.7	54,491	9.5
1971	39,144	78.6	10,638	21.4	49,782	9.1
1970	37,389	81.9	8,239	18.1	45,628	0.5

Source: Replacement battery figures supplied by Battery Council International. New cars and trucks are U.S. factory sales figures provided by Motor Vehicle Manufacturers Assn.

Replacement Batteries

Total replacement battery shipment aggregated 53.6-million units in 1981, with 12-volt and 6-volt automotive batteries accounting for 91.1% of the total, according to Battery Council International in its annual sales and activity report.

Replacement Batteries

Passenger cars and light trucks:

12-Volt: 42,790,227, or 80.4% of the total; 6-volt: 1,529,009, or 2.9% of the total.

Heavy duty commercial:

12-Volt: 2,211,450, or 4.2% of the total; 6-Volt: 1,934,968, or 3.6% of the total.

Original Equipment

Passenger cars and light trucks:

12-Volt: 8,661,210, or 86.4% of the total; 6-Volt: 42,750, or 0.4% of the total.

Heavy duty commercial:

12-Volt: 591,342, or 5.9% of the total; 6-Volt: 133,746, or 1.3% of the total.

Source: Battery Council International.

Where Batteries Are Sold

Channel of Distribution	Shipment in Units: 1981 (a) Private Brands	1981 (a) Mfr.'s Own Brand	1981 (a) Total	1980 (a) Private Brands	1980 (a) Mfr.'s Own Brand	1980 (a) Total
Gasoline & Oil	2,678,353	407,476	3,035,829	2,667,335	596,112	3,263,947
Tires & Rubber	1,569,843	750,740	2,320,583	1,451,328	736,840	2,188,168
Mass Merchandisers (Department and Discount Stores)	14,255,477	140,915	14,396,392	12,763,[illegible]50	121,527	12,885,377
Mass Merchandisers (Auto Chains and Others)	4,133,712	791,568	4,925,280	4,136,500	486,758	4,623,258
Fleet Operations	5,513	308,712	314,225	41,192	246,444	287,636
Vehicle & Equipment Manufacturers	1,994,248	381,826	2,376,074	1,829,552	398,095	2,227,647
Parts Distributors	4,143,845	5,775,519	9,919,364	3,943,757	5,948,407	9,892,164
Battery Specialists	9,774,679	4,330,742	14,105,421	8,655,413	4,080,345	12,735,758
Others	115,249	656,571	771,820	99,323	637,754	737,007
Total	**38,670,919**	**13,544,069**	**52,214,988**	**35,588,750**	**13,252,282**	**48,841,032**

(a) Figures based on 20 reporting members.

Source: Battery Council International.

Tire Shipments Rise in '81

Almost surprisingly, tire shipments showed moderate increases in 1981 in all areas except replacement and exports of farm implement equipment. Even though passenger car sales were dismal in 1981, shipments of original equipment tires were up 3.5% while those in the replacement market jumped 18.7%. Similarly, truck and bus tires also were up in 1981—8.3% for original equipment and 15.6% for replacements. This marked a surprising upswing over 1980, which was the poorest in the industry in almost 25 years.

How 1981 Compared With 1980

	Passenger	Truck	Farm	Total by Type of Market
Original Equipment	3.5%	8.3%	1.8%	4.1%
Replacement	18.7	15.6	−35.1	17.3
Export	1.0	11.4	−15.6	3.1
Total by Type	**14.6%**	**15.1%**	**−20.8%**	**13.8%**

Source: NPN based on Rubber Manufacturers Assn. Statistical Report.

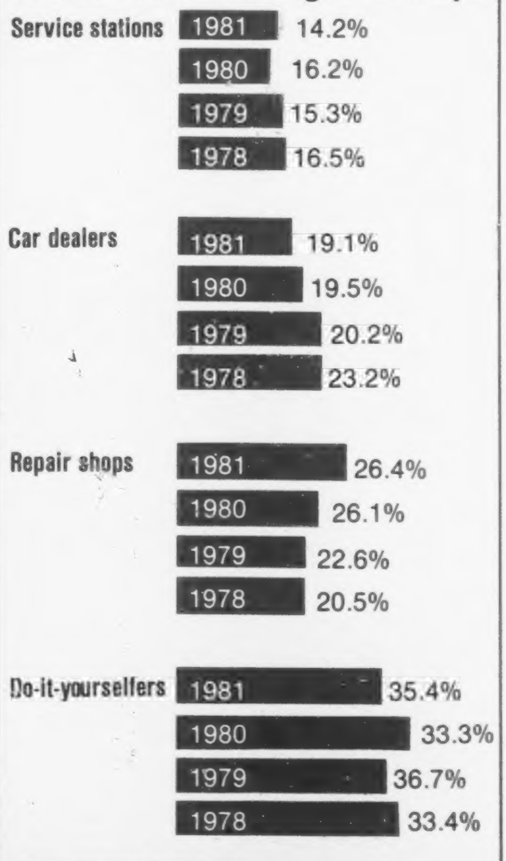
Auto, Truck and Farm Tire Shipments

(Add 000)

	Type of Tire							
	Passenger/ Motorcycle	% of Market	Bus/ Truck	% of Market	Farm Implement	% of Market	Total of Market Type	% of Total
1981								
Original Equipment	36,167	83.2%	5,732	13.2%	1,597	3.7%	43,496	21.1%
Replacement	126,915	80.8	28,453	18.1	1,661	1.0	157,029	76.1
Export	4,113	69.2	1,661	27.9	173	2.9	5,947	2.9
Total	**167,195**	**81.0%**	**35,846**	**17.4%**	**3,431**	**1.7%**	**206,472**	
1980								
Original Equipment	34,933	83.6%	5,294	12.3%	1,569	3.8%	41,796	23.0%
Replacement	106,912	79.9	24,539	18.2	2,560	2.0	133,831	73.8
Export	4,074	70.6	1,491	25.8	205	3.6	5,770	3.2
Total	**145,919**	**80.4%**	**31,144**	**17.2%**	**4,334**	**2.4%**	**181,397**	

Source: Rubber Manufacturers Assn. Statistical Report.

Where consumers get tuneups



Source: Champion Spark Plug Co.

Antifreeze Sales

(Add 000 gal.)

Year	Type: Ethylene glycol	Type: Methanol	Total
1980	184,340	(*)	184,340
1979	154,240	(*)	154,240
1978	137,161	(*)	137,161
1977	142,308	(*)	142,308
1976	143,332	(*)	143,332
1975	217,675	(*)	217,675
1974	186,936	(*)	186,936
1973	208,540	(*)	208,540
1972	200,703	(*)	200,703
1971	192,647	430	193,607
1970	177,606	455	178,061
1969	163,484	743	164,226
1968	152,438	1,138	153,576
1967	142,190	1,500	143,690

(*) Survey no longer conducted.
Source: Chemical Specialties Manufacturers Assn.

Ethylene Glycol-Base Antifreeze Sales—1980

(Add 000 gal.)

	Civilian	Government
Packaged ethylene glycol antifreeze sold in:		
quarts and gallons	107,168	NA
drums	8,881	NA
Bulk ethylene glycol antifreeze (or ethylene glycol for antifreeze) sold to packagers	49,547	NA
Bulk ethylene glycol antifreeze (or ethylene glycol for antifreeze) sold to motor-vehicle manufacturers for "drive-away" or factory-fill use	15,922	NA
Total	**181,518**	**NA**

Source: Chemical Specialties Manufacturers Assn.

Auto Products and Services Continue Up

Even though the pace slowed down a bit, sales of automotive products and services continued their upward swing in 1981 and seemed headed for higher levels in 1982 and thereafter, according to the 1982 edition of "Franchising in the Economy," a yearbook issued by the Bureau of Industrial Economics of the U.S. Department of Commerce.

Total sales in 1981 were 6.7% higher than the preceding year and the forecast for 1982 indicates they would climb another 9.7% this year. The number of establishments also is scheduled to rise in 1982 after two or three years of a relative flattening-out process. This year's total is expected to exceed 43,000 units. This is not as high as had been anticipated last year; nevertheless it is a significant upswing after the doldrums of recent years.

Average sales per establishment were higher in 1981 and are still moving up this year. As might be expected, sales in company-owned stores represent the lion's share of the business.

Automotive Products and Services (a)

	1982 (b)	1981 (b)	1980
Total number of establishments:	43,151	40,739	40,210
Company-owned	4,351	4,220	4,221
Franchisee-owned	38,800	36,519	35,989
Total sales of products and services: ($000) (c)	$8,289,963	$7,555,599	$7,083,836
Company-owned (c)	2,599,526	2,399,872	2,265,366
Franchisee-owned (c)	5,690,437	5,155,727	4,818,470
Average sales per establishment (c)	$193,000	$185,000	$176,000
Company-owned	597,000	569,000	537,000
Franchisee-owned	147,000	141,000	134,000
Employment	N.A.	N.A.	173,705
Company-owned	N.A.	N.A.	36,300
Franchisee-owned	N.A.	N.A.	137,405

(a) Includes tire, battery and accessory stores; auto and truck wash services; and brake and muffler repair and services; (b) Data estimated by respondents; (c) Includes sales of non-automotive products such as household appliances, garden supplies, etc.
Source: "Franchising in the Economy, 1980-1982," Bureau of Industrial Economics, U.S. Department of Commerce.

Drain Intervals

1982 Crankcase Drain Intervals and Recommended Oil

		Normal Service		Severe Service		
Make	Engine	Miles	Months	Miles	Months	Type of Oil
American Motors	All	7,500	7.5	—	—	SF
Chrysler Dodge Plymouth	All	7,500	12	3,000	3	SF
Ford	—	—	—	—	—	—
Lincoln	4 (Turbo)	6,000	12	3,000	3	SF SF-CC SF-CD
Mercury	Others	7,500	12	3,000	3	SF SF-CC SF-CD
General Motors	Gasoline	7,500	12	3,000	3	SF SF-CC SF-CD
	Diesel	5,000	—	5,000	—	SF-CC SF-CD

Source: Gousha-ChekChart.

1982 Automatic Transmission Fluids and Drain Recommendations

		Normal Service		Severe Service	
Make	Fluid	Months	Miles	Months	Miles
American Motors	Dexron II	—	(c)	30	30,000
Chrysler	Dexron II (a)	—	(c)	—	15,000
Ford	Dexron II	—	(c)	—	—
		—	(c)	22½	22,500
General Motors	Dexron II (b)	—	100,000	—	15,000

(a) Including automatic transaxles (both sumps). Interval is for transmission sump.
(b) Including automatic transaxles.
(c) Drain not required for normal service.

1982 Chassis Lubrication Intervals

	Normal Service		Severe Service			
Make	Months	Miles	Month	Miles	Type	Part Specification No.
American Motors	15 (a)	15,000 (a)	Shorter Intervals		#2 Lithium	8991230
Chrysler	36	30,000	18	15,000	#2 Barium EP	2525035
Ford	30	30,000	Shorter Intervals		#2 Lithium (suspension)	MIC75-B
					#4-5 Lithium (steering)	MIC92-AII
General Motors	12 (b)	7,500 (b)	Shorter Intervals		#1-2 Multipurpose EP	6031-M

(a) Eagle steering linkage: 7.5 months/12,500 miles.

(b) Diesel engine cars: 12 months or 5,000 miles.
Source: Gousha-ChekChart. Reprinted with permission.

1981 Service Job Analysis offers exclusive aftermarket profile

Here's another first for NPN's 1982 Factbook: key data from the 1981 Service Job Analysis, the sixth in a series of triennial aftermarket studies conducted by Hunter Publishing Co. The 1981 SJA—the most detailed and comprehensive analysis of traditional aftermarket activity ever undertaken—reports on over 250 service jobs performed, plus parts, chemicals and accessories used or sold nationally by approximately 323,000 service stations, independent repair shops, new car and truck dealer service departments and self-serviced fleet repair locations servicing 25 or more truck-type vehicles. (Not included in the SJA are figures for discount stores, home and auto chains or other non-traditional outlets.)

The table below presents data on the total service jobs performed or products sold during calendar 1981 by traditional outlets. It also shows totals by individual market segments, along with the percentage of jobs performed by each market segment. The categories shown were specifically selected to reflect the type of service activity or products normally of interest to petroleum marketers.

Data is presented for a total of 120,000 service stations (those with repair facilities), 136,000 repair shops, 28,000 car/truck service departments, and 39,000 fleet repair locations.

The information developed for the 1981 SJA was gathered through Hunter's Micromarket Research Panel, a national aftermarket panel comprising almost 5,000 members of representative segments of the Traditional Automotive Service industry.

Total Jobs Performed by ALL SHOPS (Universe—323,000 Shops)

		. . . by Type of Outlet (add 000)							
Job Description	Total Jobs Performed (add 000)	Service Stations	% of Jobs	Independent Repair Shops	% of Jobs	New Car/Truck Dealer Shops	% of Jobs	Self-Serviced Fleet Shops	% of Jobs
Lube Jobs (Car)	119,570	63,829	53.4	23,643	19.8	29,135	24.4	2,963	2.5
Lube Jobs (Truck/Bus)	26,610	8,450	31.8	4,177	15.7	3,756	14.1	10,227	38.4
Oil Changes (Car/Truck)	149,794	75,884	50.7	28,256	18.9	34,223	22.8	11,431	7.6
Oil Filters Replaced (Car/Truck)	142,334	69,650	48.9	28,884	20.3	31,768	22.3	12,059	8.5
Air Filters Replaced	50,040	23,053	46.1	14,367	28.7	8,728	17.4	3,892	7.8
Carburetors Installed (New)	1,460	557	38.2	600	41.1	192	13.2	111	7.6
Carburetors Installed (Rebuilt)	1,717	836	48.7	483	28.1	270	12.2	188	10.9
Carburetors Cleaned on Vehicles	7,920	3,431	43.3	2,663	33.6	1,456	18.4	370	4.7
Carburetors Overhauled (In Shop)	8,083	1,718	21.3	3,835	47.4	2,013	24.9	517	6.4
Fuel Pumps Installed (New)	4,365	1,476	33.8	1,864	42.7	746	17.1	279	6.4
Fuel Pumps Installed (Rebuilt)	1,181	514	43.5	353	29.9	205	17.4	109	9.2
Fuel Filters Replaced	41,965	13,496	32.2	15,344	36.6	8,457	20.2	4,668	11.1
Engine Tune-Ups (Car)	46,291	15,767	34.1	17,477	37.8	11,870	25.6	1,177	2.5
Engine Tune-Ups (Truck/Bus)	9,701	1,871	55.1	3,345	34.5	2,062	21.3	2,423	25.0
Spark Plugs (New)	297,412	95,091	32.0	122,753	41.3	63,786	21.4	15,782	5.3
Spark Plugs (Clnd/Regapped/Reinstalled)	31,812	12,133	38.1	11,411	35.9	4,599	14.5	3,669	11.5
Batteries Sold	21,540	10,736	49.8	5,729	26.6	2,641	12.3	2,434	11.3
Batteries Recharged	37,384	22,773	60.6	8,344	22.2	3,602	9.6	2,865	7.6
Battery Cables Sold	12,721	6,631	52.1	3,567	28.0	1,362	10.7	1,161	9.1
Alternators Installed (New)	1,620	666	41.1	524	32.3	277	17.1	153	9.4
Alternators Installed (Rebuilt)	10,995	4,686	42.6	4,332	39.4	1,055	9.6	922	8.4

Total Jobs Performed (cont.'d)

Job Description	Total Jobs Performed (add 000)	. . . by Type of Outlet (add 000)							
		Service Stations	% of Jobs	Independent Repair Shops	% of jobs	New Car/Truck Dealer Shops	% of Jobs	Self-Serviced Fleet Shops	% of Jobs
Voltage Regulators Installed (New)	6,665	2,442	36.6	2,661	39.9	1,171	17.6	391	5.9
Voltage Regulators Installed (Reblt)	764	269	35.2	286	37.4	124	16.2	85	11.1
V-Belts Installed (All Types)	45,580	21,908	48.1	14,488	31.8	5,570	12.2	3,614	7.9
Radiator Hose Replaced (Rubber)	20,219	9,908	49.0	6,302	31.2	2,573	12.7	1,436	7.1
Radiator Hose Replaced (Silicone)	853	356	41.7	136	15.9	151	17.7	210	24.6
Heater Hose Replaced (Rubber)	14,390	5,972	41.5	5,725	39.8	1,575	10.9	1,118	7.8
Heater Hose Replaced (Silicone)	871	275	31.6	314	36.1	153	17.6	129	14.8
Permanent Anti-Freeze Sold (Gals)	67,581	30,408	45.0	17,238	25.5	10,913	16.1	9,022	13.3
Mufflers Replaced (Car)	11,461	5,083	44.4	4,572	39.9	1,590	13.9	216	1.9
Mufflers Replaced (Truck/Bus)	2,808	638	22.7	1,161	41.3	305	10.9	704	25.1
Tires Sold (Car-New)	30,070	19,354	64.4	7,362	24.5	2,729	9.1	625	2.1
Tires Sold (Truck/Bus-New)	4,039	1,671	41.4	1,000	24.8	278	6.9	1,090	27.0
Retread Tires Sold (Car)	3,802	1,929	50.7	1,238	32.6	260	6.8	375	9.9
Retread Tires Sold (Truck/Bus)	1,525	449	29.4	499	32.7	48	3.1	529	34.7
Tires Repaired	71,665	57,142	79.7	8,219	11.5	1,033	1.4	5,274	7.4
Tubes Sold (New)	6,054	4,153	68.6	1,322	21.8	98	1.6	481	7.9
Tubes Repaired	9,065	5,676	62.6	1,398	15.4	119	1.3	1,872	20.7
Engine Oil Additives Sold (Cans)	14,824	8,795	59.3	2,633	17.8	2,767	18.7	629	4.2
Gasoline Additives Sold (Cans)	18,333	12,309	67.1	3,023	16.5	2,121	11.6	880	4.8
Gear Lube Additives Sold (Cans)	2,700	1,246	46.1	640	23.7	624	23.1	190	7.0
Transmission Additives Sold (Cans)	5,306	3,018	56.9	1,716	32.3	507	9.6	65	1.2
Cooling System Additives Sold (Cans)	14,114	7,111	50.4	3,782	26.8	1,756	12.4	1,465	10.4
Cooling System Cleaner Sold (Cans)	7,541	4,228	56.1	1,606	21.3	1,253	16.6	454	6.0
Cooling System Sealer Sold (Cans)	9,417	6,550	69.6	1,841	19.5	707	7.5	319	3.4
Windshield Wiper Motors Repl. (New)	1,073	248	23.1	267	24.9	345	32.2	213	19.9
Windshield Wiper Motors Repl. (Reblt)	1,077	373	34.6	463	43.0	97	9.0	144	13.4
Windshield Wiper Arms Replaced	2,757	1,010	36.6	730	26.5	477	17.3	540	19.6
Windshield Wiper Refills Installed	34,614	21,132	61.1	7,634	22.1	4,044	11.7	1,804	5.2
Windshield Wiper Blades Replaced	21,889	10,527	48.1	5,145	23.5	3,464	15.8	2,753	12.6
Windshield Washer Pumps Replaced	2,759	1,073	38.9	1,053	38.2	457	16.6	176	6.4
Wash Jobs (Car-Automatic)	28,931	16,897	58.4	4,923	17.0	6,054	20.9	1,057	3.7
Wash Jobs (Truck/Bus-Automatic)	7,751	563	7.3	197	2.5	992	12.8	5,999	77.4
Engines Steam Cleaned (External)	6,331	888	14.0	1,350	21.3	1,902	30.0	2,191	34.6
Gasoline Sold (Gals)	51,064,560	40,661,810	79.5	4,316,250	8.5	1,308,090	2.6	4,778,410	9.4
Diesel Fuel Sold (Gals)	622,229	260,152	41.8	58,449	9.4	10,916	1.8	292,712	47.0
Engine Oil Sold (Qts)	1,057,419	574,393	54.3	192,569	18.2	146,263	13.8	144,194	13.6
Gasoline Pumps (Number)	765	651	85.1	54	7.1	6	.8	54	7.9
Service Bays (Number)	1,297	271	20.9	518	39.9	32.9	25.4	179	13.8

1981 SJA shows service station TBA and repair activity

Fewer stations, more business per station. That's a capsule view of the national service station market in 1981, according to Hunter Publishing Co.'s 1981 Service Job Analysis.

The figures shown here were selected from the major categories of repair and service activity among service stations as reported in Hunter's exclusive 1981 SJA report. The table presents total service jobs performed or products sold by the 120,000 service stations projected for 1981 by Hunter's Micromarket research. As defined in the SJA, these are stations with service bays, with a minimum of one full-time mechanic per station.

Although the total number of stations doing repair and service dropped from 145,000 in 1978 (the figure shown in the previous SJA), average dollar volume per station showed a significant increase in 1981 over 1978. In 1981, repair and maintenance work accounted for $108,700 per station, including sales of parts, accessories and labor at retail. This total is 33% higher than the 1978 figure of $81,700 per station and more than double the 1975 total of $51,800.

The figures below show total number of jobs performed in each category and the percentage of stations performing that category of service. In addition, totals in each service job are shown for all nine U.S. Census Regions.

Jobs Performed by SERVICE STATIONS (Universe—120,000 Stations)

			... by Census Region (add 000)								
Job Number and Description	**% Stations Performing**	**Total Jobs Performed (add 000)**	**New England**	**Middle Atlantic**	**East North Central**	**West North Central**	**South Atlantic**	**East South Central**	**West South Central**	**Mountain**	**Pacific**
Lube Jobs (Car)	98.4	63,829	2,417	7,505	12,006	5,469	9,991	3,328	7,859	2,127	13,127
Lube Jobs (Truck/Bus)	67.9	8,450	385	774	1,414	945	1,516	568	824	715	1,309
Oil Changes (Car)	96.6	68,121	2,838	8,167	12,568	6,020	10,688	3,447	8,065	2,250	14,078
Oil Filters Replaced (Car)	97.0	63,019	2,752	7,713	11,417	6,095	9,869	3,333	6,994	2,111	12,735
Air Filters Replaced	86.1	23,053	1,508	2,867	4,450	1,954	3,952	732	2,780	1,137	3,673
Front Wheels Repacked (Car)	84.3	11,602	424	1,495	2,697	1,108	1,701	374	1,321	678	1,804
Oil Changes (Truck/Bus)	65.8	7,763	365	914	1,090	809	1,412	427	844	703	1,199
Oil Filters Replaced (Truck/Bus)	63.1	6,631	287	746	895	658	1,097	550	546	461	1,391
Carburetors Installed (New)	24.3	557	54	134	122	23	60	4	31	26	103
Carburetors Installed (Rebuilt)	32.6	836	82	198	165	49	114	15	45	19	149
Carburetors Cleaned on Vehicles	44.8	3,431	300	533	1,323	250	314	17	161	149	384
Carburetors Overhauled (In Shop)	42.9	1,718	103	155	377	134	376	41	157	191	184
Fuel Pumps Installed (New)	52.7	1,476	71	183	354	176	200	4	178	120	190
Fuel Pumps Installed (Rebuilt)	18.0	514	18	75	83	51	135	58	23	23	48
Fuel Filters Replaced	84.2	13,496	982	2,108	3,835	1,161	1,589	250	891	1,123	1,557
Engine Tune-Ups (Car)	87.9	15,767	1,118	2,318	4,004	1,175	2,667	318	1,184	586	2,397
Engine Tune-Ups (Truck/Bus)	41.4	1,871	166	170	361	177	430	11	81	151	324
Spark Plugs (New)	82.3	95,091	6,381	18,562	24,218	6,998	13,843	1,727	6,278	3,352	13,732
Spark Plugs (Clnd/Regapped/Reinstalled)	24.8	12,133	1,557	1,389	4,680	334	1,432	257	215	266	2,003
Batteries Sold	94.4	10,736	583	1,327	1,797	1,059	1,666	572	1,278	645	1,809
Batteries Recharged	97.1	22,773	952	3,687	3,500	1,434	4,070	935	2,992	1,168	4,035
Battery Cables Sold	82.7	6,631	372	781	1,076	618	1,188	278	789	349	1,180

Jobs Performed by SERVICE STATIONS (cont'd.)

			... by Census Region (add 000)								
Job Number and Description	% Stations Performing	Total Jobs Performed (add 000)	New England	Middle Atlantic	East North Central	West North Central	South Atlantic	East South Central	West South Central	Mountain	Pacific
Alternators Installed (New)	16.6	666	6	78	163	28	138	15	100	19	119
Alternators Installed (Rebuilt)	73.0	4,686	306	817	1,000	348	792	128	293	282	720
Voltage-Regulators Installed (New)	61.4	2,442	189	440	334	168	324	208	149	185	445
Voltage-Regulators Installed (Reblt)	7.3	269	16	7	138	22	23	40	6	2	15
V-Belts Installed (All Types)	92.4	21,908	1,282	3,123	3,893	2,136	4,078	807	2,559	965	3,065
Radiator Hose Replaced (Rubber)	87.7	9,908	574	1,461	1,654	808	2,063	532	1,250	328	1,238
Heater Hose Replaced (Rubber)	76.8	5,972	1,329	573	705	570	943	160	588	338	766
Permanent Anti-Freeze Sold (Gals)	90.6	30,408	1,828	5,161	6,053	2,789	4,965	1,105	2,309	2,224	3,974
Mufflers Replaced (Car)	78.2	5,083	322	787	959	403	804	187	1,214	75	332
Mufflers Replaced (Truck/Bus)	24.5	638	34	84	150	104	138	4	17	26	81
Tires Sold (Car-New)	86.3	19,354	1,119	2,177	3,586	2,786	3,076	636	1,732	1,274	2,968
Tires Sold (Truck/Bus-New)	24.9	1,671	124	108	279	276	155	15	109	386	219
Retread Tires Sold (Car)	22.4	1,929	181	397	137	127	554	89	4	180	260
Retread Tires Sold (Truck/Bus)	5.5	449	22	55	39	45	82	—	10	132	64
Tires Repaired	96.9	57,142	2,703	5,768	9,691	7,408	8,518	3,874	10,359	2,685	6,136
Tubes Sold (New)	66.6	4,153	139	367	636	624	504	220	750	448	465
Tubes Repaired	78.8	5,676	135	398	599	702	799	358	1,633	708	344
Engine Oil Additives Sold (Cans)	68.3	8,795	302	1,118	1,168	820	1,707	428	1,380	460	1,412
Gasoline Additives Sold (Cans)	70.1	12,309	821	2,064	1,839	1,304	1,688	353	1,398	1,149	1,693
Gear Lube Additives Sold (Cans)	19.2	1,246	70	102	141	66	205	7	278	193	184
Transmission Additives Sold (Cans)	50.6	3,018	89	355	455	336	624	34	471	191	463
Cooling System Additives Sold (Cans)	68.6	7,111	303	732	1,712	887	1,384	117	530	340	1,106
Cooling System Cleaner Sold (Cans)	60.2	4,228	169	624	727	283	945	116	383	211	770
Cooling System Sealer Sold (Cans)	72.6	6,550	370	800	1,375	439	1,224	264	630	197	1,251
Windshield Wiper Arms Replaced	35.2	1,010	152	171	121	49	164	24	39	49	241
Windshield Wiper Refills Installed	86.2	21,132	1,232	2,869	4,047	1,946	3,628	1,214	1,709	879	3,608
Windshield Wiper Blades Replaced	76.2	10,527	627	1,763	2,001	1,100	1,943	347	762	449	1,535
Windshield Washer Pumps Replaced	37.4	1,073	89	238	351	56	161	31	37	33	77
Engines Steam Cleaned (External)	19.2	888	63	90	76	64	157	6	281	25	126
Gasoline Sold (Gals)	100.0	40,661,810	2,306,450	4,966,000	6,668,330	2,855,240	6,883,510	2,161,360	5,320,320	1,802,220	7,698,380
Diesel Fuel Sold (Gals)	18.0	260,152	9,257	11,176	25,301	50,846	41,474	22,534	28,934	31,164	39,466
Engine Oil Sold (Qts)	95.0	574,393	28,034	62,461	103,664	48,885	98,887	40,601	56,167	23,022	112,672
Gasoline Pumps (Number)	98.2	651	32	76	123	57	98	45	70	34	116
Service Bays (Number)	96.5	271	15	40	50	23	43	14	33	13	40

Oil Jobbers and TBA: A 1982 Profile

In January of 1982, Hunter Publishing Co. made a major study of oil jobbers to (1) establish a current profile of the American oil jobbers and (2) gauge the jobber's involvement in the automotive TBA business.

This 1982 profile is appearing for the first time in the NPN FACTBOOK. Working with Great Lakes Marketing, an independent research firm, Hunter mailed detailed questionnaires to 2,112 domestic oil jobbers in January and received 1,219 usable responses—a well-above-average response rate of 57.7%. The survey sample was carefully designed to reflect the geographic distribution of the total jobber universe.

The new study emphatically confirms that oil jobbing is a big dollar volume business today. As the tables show, 44% of all oil jobbers have an annual volume over $5-million and 27% report a volume in excess of $10-million. Only 13% report dollar volumes below the $1-million mark.

The average jobber in the Hunter/NPN sample supplies 20.7 service stations. Of these, 27.5% are owned and operated by the jobber, 18.4% are owned and leased to others.

Jobbers deliver a mean average of 1,216,600 gal. of gasoline per month. The average jobber owns and operates 16.8 vehicles, including delivery units and passenger cars.

Jobber Annual Sales Volume

Sales Volume	Number of Respondents	% of Respondents
Under $500,000	51	4.7%
$500,000-$1 million	91	8.3
$1-$3 million	297	27.2
$3-$5 million	165	15.1
$5-$10 million	195	17.9
Over $10 million	292	26.8

Monthly Gasoline Deliveries *(All outlets)*

Gal. Delivered Per Month (Add 000)	Number of Respondents	% of Respondents
Under 60	142	14.8%
60-99.9	105	10.9
100-199	150	15.8
200-299	108	11.2
300-399	76	7.9
400-499	65	6.8
500-699	92	9.5
700-999	60	6.3
1,000-1,999	86	8.9
2,000-2,999	26	2.7
3,000-9,999	37	3.9
10,000 and over	12	1.3
Mean Average		**1,216,600**

Number of Stations Supplied

Number of Stations	Number of Respondents	% of Respondents
None	166	13.5%
1-4	349	28.6
5-9	222	18.2
10-14	135	11.1
15-19	96	7.9
20-29	88	7.2
30-39	51	4.3
40-49	30	2.4
50 and Over	82	6.8
Average		**20.7 Stations Supplied**

Jobber Owned and Operated Stations

Number of Stations	Number of Respondents	% of Respondents
None	513	42.0%
1	283	23.1
2	104	8.5
3	70	5.7
4	48	3.9
5	31	2.5
6	20	1.6
7	19	1.6
8	18	1.5
9	8	.7
Over 10	105	8.9
Mean Average		**5.7**

Jobber Owned Leased Stations

Number of Stations	Number of Respondents	% of Respondents
None	692	56.7%
1	137	11.2
2	95	7.8
3	55	4.5
4	43	3.5
5	37	3.0
6	30	2.5
7	15	1.2
8	16	1.3
9	13	1.1
Over 10	86	7.2
Mean Average		**3.8**

Independently Owned Stations Supplied

Number of Stations	Number of Respondents	% of Respondents
None	427	34.9%
1	132	10.8
2	95	7.8
3	67	5.5
4	68	5.6
5	47	3.9
6	43	3.5
7	33	2.7
8	31	2.5
9	23	1.9
10 and Over	253	20.9
Mean Average		**9.3**

Jobber-TBA Profile (continued)

Part II of the study indicates that approximately 60% of all jobbers surveyed handle one or more TBA line. About one third of these TBA-handling jobbers report annual TBA sales of under $20,000; but another third sell over $100,000 per year in TBA lines, and 6.5% have annual TBA sales of $500,000 and over. TBA accounts for 8.5% of total dollar volume for the average TBA-handling jobber.

As would be expected, jobber involvement in TBA is heavy in oil and filters (46% of all jobbers carry these items); spark plugs (24%); windshield wiper refills (26.9%); ignition point sets (19.4%); belts (26%); radiator hose (22.5%); batteries (37.5%); lamps (26.6%); sealed beam headlights (27.2%); thermostats (20.6%); antifreeze (56.2%); and additives (26.8%).

The percentage of all jobbers handling shock absorbers (17.8%); mufflers (12.9%); brake shoes and pads (14.1%); oil and grease seals (13.3%); wire and cable products (13.3%); and air conditioning Freon (13.1%) is also substantial.

Jobbers Handling Minimum One TBA Line

Total Response		Northeast		North Central		South		West	
No.	%	No.	%	No.	%	No.	%	No.	%
720	60.6	48	37.8	268	64.6	254	59.9	131	69.7

Annual TBA Sales Volume *(TBA Handling Jobbers)*

Annual TBA Sales Volume	Number of Respondents	% of Respondents
$ 1,000-19,999	164	33.2%
20,000-29,999	42	8.5
30,000-39,999	28	5.7
40,000-49,999	16	3.2
50,000-99,999	85	17.2
100,000-199,999	73	14.7
200,000-499,999	54	10.9
500,000 and Over	32	6.5
Mean Average		**$258,349**

TBA Percentage of Total Sales

TBA % of Total Jobber Sales	Number of Respondents	% of Respondents
1%	174	36.3%
2	49	10.2
3	23	4.8
4	15	3.1
5	61	12.7
6	5	1.0
7	7	1.5
8	11	2.3
9	4	.8
10	51	10.6
Over 10	79	16.3
Mean Average		**8.5%**

Jobber TBA Customer Types

Customer Type	Number of Respondents	% of Respondents (a)	% of TBA Sales Volume (b)
Service Stations Your Firm Owns & Operates	318	61.0%	34.1%
Service Stations Your Firm Owns & Leases	226	43.4	17.4
Other Service Stations	240	46.1	17.2
Repair Garages	119	22.8	3.4
Auto Parts Jobbers	47	9.0	1.7
Car/Truck Dealers	61	11.7	1.2
Retail Auto Parts Stores	47	9.0	1.5
Fleets	109	20.9	4.2
Farms	162	31.1	9.5
Marines	17	3.3	.2
Other	53	10.1	9.5

(a) Column three refers to the numbers cited in column two.
(b) Column four refers exclusively to those who sell to the given customer type.
Source: NP[illegible] Hunter Publishing Co., April, 1982.

U.S. Refineries and Capacities by States

(Crude Oil Operating Capacity on Jan. 1, 1981)

Company	b/d
Alabama	
Coral Petroleum (formerly Vulcan Asphalt Refining Co.), Tuscaloosa	10,000
Hunt Oil Co., Tuscaloosa	35,000
Louisiana Land & Exploration Co., Mobile	41,300
Marion Corp., Theodore	25,000
Mobile Bay Refining Co., Chickasaw	28,100
Warrior Asphalt Co. of Alabama, Holt	5,000
Total	**144,400**
Alaska	
Atlantic Richfield Co., North Pole	14,200
Chevron U.S.A., Kenai	22,000
Earth Resources Co. of Alaska, North Pole	38,000
Tesoro Petroleum Corp., Kenai	48,500
Total	**122,700**
Arizona	
Arizona Fuels Corp., Fredonia	6,000
Total	**6,000**
Arkansas	
Berry Petroleum Co., a subsidiary of Crystal Oil Co., Stephens	4,000
Cross Oil & Refining Co. of Arkansas, Smackover	9,700
Mcmillan Ring-Free Oil Co., Norphlet	4,400
Tosco Corp., El Dorado	47,000
Total	**65,100**
California	
Anchor Refining Co. (formerly Sierra Anchor Refining Co.), McKittrick	10,000
Atlantic Richfield Co., Carson	212,000
Beacon Oil Co., Hanford	17,300
Champlin Petroleum Co., Wilmington	60,000
Chevron U.S.A., Bakersfield	26,000
El Segundo	390,000
	*15,000
Richmond	294,000
	*71,000
Coastal Petroleum Co., Paloma	10,200
Conoco (formerly Continental Oil Co.), Paramount	46,500
Santa Maria	9,500
Demenno Resources, Compton	15,000
ECO Petroleum, Inc., Long Beach	11,000
Edgington Oil Co., Long Beach	29,500
Exxon Co. U.S.A., Benecia	102,000
Fletcher Oil & Refining Co., Carson	29,500
Getty Refining & Marketing Co. (formerly Mohawk Petroleum Corp.), Bakersfield	40,900
Gibson Oil & Refining Co., Bakersfield	4,600
Golden Eagle Refining Co., Inc., Carson	16,170
Gulf Oil Co. U.S., Santa Fe Springs	51,500
Huntway Refining Co., Wilmington	5,500
Kern County Refinery, Inc., Bakersfield	21,400
Lunday-Thagard Oil Co., South Gate	12,000
Mcmillan Ring-Free Oil Co., Long Beach	12,200
Marlex Oil & Refining, Inc. (formerly Basin Petroleum, Inc.), Long Beach	19,000
Mobil Oil Corp., Torrance	123,500
Newhall Refining Co., Newhall	17,600
Oxnard Refinery, Oxnard	4,000
Pacific Refining Co., a subsidiary of Coastal States Gas Corp., Hercules	85,000
Powerine Oil Co., Santa Fe Springs	44,120
Quad Refining Corp., Bakersfield	7,000
Road Oil Sales Inc., Bakersfield	3,000
Sabre Refining, Inc., Bakersfield	10,000
San Joaquin Refining Co., Bakersfield	12,000
Shell Oil Co., Martinez	91,400
	*12,600
Wilmington	93,000
Sunland Refining Corp., Bakersfield	15,000
Texaco Inc., Wilmington	75,000
Tosco Corp., Avon	126,000
	*11,000
Bakersfield	40,000
U.S.A. Petrochem Corp., Ventura	24,000
Union Oil Co. of California	
Arroyo Grande	41,000
Rodeo	70,000
Wilmington	108,000
West Coast Oil Co., Oildale	21,000
Witco Chemical Corp., Oildale	11,000
Total	**2,475,490**
Colorado	
Asamera Oil (U.S.), Commerce City	40,000
Conoco (formerly Continental Oil Co.), Commerce City	10,100
Gary Refining Co., Fruita	13,100
Total	**63,200**
Delaware	
Getty Refining & Marketing Co., Delaware City	140,000
Total	**140,000**
Florida	
Manatee Energy Co., Manatee	0
	*28,400
Seminole Refining, Inc., St. Marks	13,000
Total	**13,000**
Georgia	
Amoco Oil Co., Savannah	24,000
Young Refining Corp., Douglasville	5,000
Total	**29,000**
Hawaii	
Chevron U.S.A., Honolulu	48,000
Total	**48,000**
Illinois	
Amoco Oil Co., Wood River	104,000
Bi-Petro Inc., Pana	*6,200
Clark Oil & Refining Corp., Blue Island	66,500
Hartford	63,600
Dillman Oil Recovery, Inc., Robinson	1,200
Energy Development, Inc. (formerly M.T. Richards), Crossville	1,000
Marathon Oil Corp., Robinson	120,000
	*75,000
Mobil Oil Co., Joliet	180,000
Shell Oil Co., Wood River	283,000
Texaco Inc., Lawrenceville	84,000
Lockport	72,000
Union Oil Co. of California, Lemont	151,000
Wireback Oil Co., Plymouth	1,800
Total	**1,128,100**
Indiana	
Amoco Oil Co., Whiting	380,000
Energy Cooperative, Inc., East Chicago	126,000
Gladieux Refinery, Inc., Fort Wayne	15,500
Indiana Farm Bureau Cooperative Association, Mt. Vernon	20,600
Indiana Refining, Inc. (formerly Princeton Refining, Inc.), Princeton	0
	*5,000
Industrial Fuel & Asphalt of Indiana, Inc., Hammond	0
	*7,600
Kentucky Oil & Refining Co., Troy	1,500
Laketon Asphalt Refining Co., Laketon	8,500
Rock Island Refining Corp., Indianapolis	43,200
Total	**595,300**
Kansas	
CRA, Inc., Coffeyville	56,500
Phillipsburg	26,400
Derby Refining Co., (subsidiary of Coastal States Petroleum Co.) North Wichita	27,982
E-Z Serv Refining, Inc., Shallow Water	9,500
Getty Refining & Marketing Co., El Dorado	80,577
Mid-America Refining Co., Chanute	3,000
Mobil Oil Corp., Augusta	50,000
National Cooperative Refinery Association, McPherson	57,000
Pester Refining Co., El Dorado	22,550
Phillips Petroleum Co., Kansas City	80,000
Total Petroleum, Inc., Arkansas City	42,500
Total	**456,009**
Kentucky	
Ashland Oil, Inc., Catlettsburg	213,400
Louisville	25,200
Kentucky Oil & Refining Co., Betsy Lane	3,000
Somerset Refinery, Inc., Somerset	5,000
Total	**246,600**
Louisiana Inland	
Atlas Processing Co., a Subsidiary of Pennzoil Co., Shreveport	45,000
Bayou State Oil Corp., Hosston	5,000
Calumet Refining Co., a Div. of Calumet Industries, Inc., Princeton	2,400
Claiborne Gasoline Co., Lisbon	6,500
Cotton Valley Solvents Co., Cotton Valley	8,000
Kerr-McGee Corp., Dubach	10,780
Port Petroleum, Inc., Stonewall	3,600
Schulze Processing, Inc., Tallulah	1,760
Total	**83,040**
Louisiana Gulf	
Bruin Refining, Inc., St. James	19,300
Calcasieu Refining, Ltd., Lake Charles	16,000
Canal Refining Co., Church Point	8,000
Cities Service Co., Lake Charles	291,000
Conoco (formerly Continental Oil Co.), Egan	15,500
Westlake	156,500
Evangeline Refining Co., Jennings	5,000
Exxon Co. U.S.A., Baton Rouge	500,000
Good Hope Industries, Inc., Good Hope	82,100
Gulf Oil Co., U.S., Belle Chasse	195,900
Venice	28,700
Hill Petroleum Co., a Subsidiary of Goldking Refining Co., Krotz Springs	48,000
International Processors, St. Rose	28,600
LaJet, Inc., St. James	20,000
Lake Charles Refining Co., (formerly Aweco), Lake Charles	28,700
Mallard Resources, Inc., Gueydon	7,400
Marathon Oil Co., Garyville	255,000
Mt. Airy Refining Co., Mt. Airy	25,000
Murphy Oil Corp., Meraux	92,500
Placid Refining Co., Port Allen	36,000
Shell Oil Co., Norco	230,000
Shepard Oil Co., Jennings	10,000
Slapco (formerly South Louisiana Production Co.), Mermentau	11,000
Sooner Refining Co., Darrow	5,400
T & S Refining Inc., Jennings	11,500
Tenneco Oil Co., Chalmette	115,000

Company	b/d
Texaco Inc., Convent	140,000
Total	**2,362,100**
Maryland	
Amoco Oil Co., Baltimore	15,000
Chevron U.S.A., Baltimore	14,200
Total	**29,200**
Michigan	
Crystal Refining Co., Carson City	3,000
Dow Chemical U.S.A., Bay City	*20,000
Lakeside Refining Co., Kalamazoo	5,600
Marathon Oil Co., Detroit	68,500
Texas American Petrochemicals, Inc., West Branch	11,500
Total Petroleum, Inc., Alma	40,000
Total	**128,600**
Minnesota	
Ashland Oil, Inc., St. Paul Park	67,143
Conoco, Wrenshall	23,500
Koch Refining Co., Rosemount	127,300
Total	**217,943**
Mississippi	
Amerada Hess Corp., Purvis	30,000
Chevron U.S.A., Pascagoula	280,000
Ergon Refining, Inc., Vicksburg	20,600
Natchez Refining Co., Natchez	7,600
Southland Oil Co., Lumberton	5,800
Sandersville	11,000
Yazoo City	5,500
Vicksburg Refining, Inc., Vicksburg	7,900
Total	**367,800**
Missouri	
Amoco Oil Co., Sugar Creek	104,000
Total	**104,000**
Montana	
Conoco, Billings	52,500
Exxon Co. U.S.A., Billings	45,000
Farmers Union Central Exchange, Laurel	33,650
	*8,000
Flying J (formerly Westco Refining Co.) Cut Bank	5,600
Kenco Refining, Inc., Wolf Point	4,700
Phillips Petroleum Co., Great Falls	6,000
Total	**147,450**
Nebraska	
CRA, Inc., Scottsbluff	5,600
Total	**5,600**
Nevada	
Nevada Refining Co., Tonopah	4,500
Total	**4,500**
New Hampshire	
ATC Petroleum, Inc., Newington	13,400
Total	**13,400**
New Jersey	
Amerada Hess Corp., Port Reading	*68,000
Chevron U.S.A., Perth Amboy	168,000
Exxon Co. U.S.A., Linden	270,000
Mobil Oil Corp., Paulsboro	99,700
	*6,900
Seaview Petroleum Co., Paulsboro	44,400
Texaco Inc., Westville	90,000
Total	**572,100**
New Mexico	
Caribou-Four Corners Oil Co., Farmington	2,500
Giant Industries, Inc., Farmington	13,500
Navajo Refining Co., Artesia	29,930
Plateau, Inc., Bloomfield	16,800
Shell Oil Co., Gallup	18,000
Southern Union Refining Co., Lovington	36,100
Monument	0
	*5,400
Thriftway Oil Co., Bloomfield	6,100
Total	**122,930**
New York	
Ashland Oil, Inc., Buffalo	64,000
Cibro Petroleum Products, Inc., Albany	33,900
Mobil Oil Corp., Buffalo	43,000
Total	**140,900**
North Carolina	
ATC Petroleum, Inc., Wilmington	11,900
Total	**11,900**
North Dakota	
Amoco Oil Co., Mandan	56,000
Flying J (formerly Westland Oil Co.), Williston	4,658
Northland Oil & Refining Co., Dickinson	5,000
Total	**65,658**
Ohio East	
Ashland Oil, Inc., Canton	66,000
Total	**66,000**
Ohio West	
Ashland Oil, Inc., Findlay	20,400
Gulf Oil Co. U.S., Cleves	43,700
Toledo	50,300
Standard Oil Co. of Ohio, Lima	168,000
Toledo	120,000
Sun Co., Toledo	125,000
Total	**527,400**
Oklahoma	
Allied Materials Corp., Stroud	7,600
Basin Refining Inc. (formerly OKC Corp.), Okmulgee	24,000
Champlin Petroleum Co., Enid	53,800
Conoco, Ponca City	134,000
Hudson Refining Co., Inc., Cushing	19,500
Kerr-McGee Corp., Wynnewood	48,630
Oklahoma Refining Co., Cyril	14,880
Sun Co., Tulsa	88,500
Texaco Inc., Tulsa	50,000
Tonkawa Refining Co., Arnett	10,000
Tosco Corp. (formerly Sun Co.) Duncan	47,500
Total Petroleum, Inc. (formerly Vickers Petroleum Corp.), Ardmore	64,100
Total	**562,510**
Oregon	
Chevron U.S.A., Portland	15,000
Total	**15,000**
Pennsylvania East	
Atlantic Richfield Co., Philadelphia	125,000
	*60,000
BP Oil Corp., Marcus Hook	164,000
Gulf Oil Co. U.S., Philadelphia	206,300
Sun Co., Marcus Hook	165,000
Total	**560,300**
Pennsylvania West	
Ashland Oil, Inc., Freedom	6,800
Pennzoil Co., Rouseville	14,600
Quaker State Oil Refining Corp. Emlenton	0
	*3,300
Smethport	6,700
United Refining Co., Warren	42,000
Witco Chemical Corp., Bradford	6,800
Total	**76,900**
Tennessee	
Delta Refining Co., Memphis	49,000
Total	**49,000**
Texas Inland	
Adobe Refining Co., a Div. of First Funding Systems Refining Corp., La Blanca	4,500
American Petrofina Co. of Texas, Big Spring	60,000
Chevron U.S.A., El Paso	76,000
Clinton Manges (formerly Sector Refining Co.), Palestine	4,000
	*6,000
Diamond Shamrock Corp., Sunray	71,100
Dorchester Refining Co., Mount Pleasant	26,500
White Deer	0
Eagle Refining Corp., Jacksboro	1,800
Flint Chemical Co., San Antonio	1,800
Howell Hydrocarbons, Inc., San Antonio	9,900
La Gloria Oil & Gas Co., Tyler	56,000
	*11,000
Longview Refining Co., a Subsidiary of Crystal Oil Co., Longview	14,000
Liquid Energy Corp., Bridgeport	10,000
Petrolite Corp., Kilgore	1,000
Phillips Petroleum Co., Borger	97,000
Pioneer Refining Ltd., Nixon	10,700
Pride Refining, Inc., Abilene	33,000
Quitman Refining Co., Quitman	6,600
Rancho Refining Co., Donna	3,500
Shell Oil Co., Odessa	32,000
Sigmor Refining Corp., Three Rivers	32,000
TARCO (formerly Texas Asphalt & Refining Co.), Euless	5,000
Tesoro Petroleum Corp., Carrizo Springs	26,100
Texaco Inc., Amarillo	20,000
El Paso	17,000
Thriftway Oil Co., Graham	2,400
Wickett Refining Co., Wickett	*8,000
Winston Refining Co., Fort Worth	20,000
Total	**643,000**
Texas Gulf	
American Petrofina Co. of Texas, Port Arthur	90,000
Amoco Oil Co., Texas City	415,000
Atlantic Richfield Co., Houston	345,000
Bronco Refining Co., Houston	2,500
Carbonit Refinery, Inc., Hearne	10,000
Champlin Petroleum Co., Corpus Christi	170,000
Charter International Oil Co., Houston	65,000
Coastal States Petroleum Co., Corpus Christi	165,000
	*15,000
Copano Refining Co., Ingleside	11,000
Crown Central Petroleum Corp., Pasadena	100,000
Eddy Refining Co., Houston	3,250
Erickson Refining Corp., Houston	30,000
Exxon Co. U.S.A., Baytown	640,000
Friendswood Refining Co., Friendswood	12,500
Gulf Energy Refining Corp., Brownsville	10,000
Gulf Oil Co. U.S.A., Port Arthur	335,800
Gulf States Oil & Refining Co., Corpus Christi	38,000
Independent Refining Corp., Winnie	50,000
Marathon Oil Co., Texas City	69,500
Mobil Oil Corp., Beaumont	268,000
	*57,600
Monsanto Co., Alvin/Texas City	12,000
Nueces Petrochemical Co., (formerly Quintana-Howell Joint Venture), Corpus Christi	30,000
Petraco-Valley Oil & Refining Co., Brownsville	12,300
Phillips Petroleum Co., Sweeny	190,000
	*28,000
Placid Refining Co., Mont Belvieu	12,400
Saber Refining Co., Corpus Christi	21,000
Sentry Refining, Inc., Corpus Christi	30,000
Shell Oil Co., Deer Park	285,000
South Hampton Co., Silsbee	20,500
Southwestern Refining Co., Corpus Christi	120,000
Sun Co., Corpus Christi	57,000
Texaco Inc., Port Arthur	365,000
Port Neches	47,000
Texas City Refining, Inc., Texas City	126,700

Company	b/d
Texas Standard Refining Co., Houston	2,000
Tipperary Refining Co., Ingleside	10,400
Uni Oil Co., Ingleside	39,400
Union Oil Co. of California, Nederland	120,000
Val Verde International, Brownsville	1,000
Total	**4,522,350**

Utah

Company	b/d
Amoco Oil Co., Salt Lake City	39,000
Caribou-Four Corners Oil Co., Woods Cross	7,500
Chevron U.S.A., Salt Lake City	45,000
Husky Oil Co., North Salt Lake	25,000
Morrison Petroleum Co., Woods Cross	6,500
Phillips Petroleum Co., Woods Cross	24,000
Plateau, Inc., Roosevelt	7,500
Western Refining Co., Woods Cross	12,500
Total	**167,000**

Virginia

Company	b/d
Amoco Oil Co., Yorktown	53,000
Total	**53,000**

Washington

Company	b/d
Atlantic Richfield Co., Ferndale	115,000
Chevron U.S.A., Richmond Beach	5,500
Mobil Oil Corp., Ferndale	71,500
Shell Oil Co., Anacortes	91,000
Sound Refining Inc., Tacoma	11,900
Texaco Inc., Anacortes	78,000
U.S. Oil & Refining Co., Tacoma	21,400
United Independent Oil Co., Tacoma	*730
Total	**384,900**

West Virginia

Company	b/d
Elk Refining Co., a Div. of Pennzoil Co., Falling Rock	5,600
Quaker State Oil Refining Corp., Newell	11,000
St. Mary's	5,000
Total	**22,300**

Wisconsin

Company	b/d
Murphy Oil Corp., Superior	40,000
Total	**40,000**

Wyoming

Company	b/d
Amoco Oil Co., Casper	48,000
C & H Refinery, Inc., Lusk	190
Glacier Park Co., Osage	10,000
Glenrock Refinery, Inc., Glenrock	6,000
Husky Oil Co., Cheyenne	23,600
Cody	11,500
Little America Refining Co., Casper	24,500
Sinclair (formerly Sinclair Oil Corp.)	72,000
Mountaineer Refining Co. Inc., La Barge	700
Sage Creek Refining Co., Inc., Cowley	600
Silver Eagle Refining Co., La Barge	1,950
Southwestern Refining Co., La Barge	1,040
Texaco Inc., Casper	21,000
Wyoming Refining Co., a subsidiary of Hermes Products, Newcastle	10,500
Total	**231,580**

Hawaiian Foreign Trade Zone

Company	b/d
Hawaiian Independent Refinery, Inc., (b) Ewa Beach	67,900
Total	**67,900**

Puerto Rico

Company	b/d
Commonwealth Oil Refining Co., Penuelas	95,000 *48,500
Gulf Oil Corp., Bayamon	37,000
Peerless Petrochemicals Inc., Ponce	10,000
Phillips Puerto Rico Core, Inc., (b) Guayama	—
Sun Co., Yabucoa	86,000
Total	**228,000**

Virgin Islands

Company	b/d
Amerada Hess Corp., St. Croix	670,000
Total	**670,000**

Guam

Company	b/d
Guam Oil & Refining Corp., Agana	43,900
Total	**43,900**

*Capacity shut down but capable of being placed in operation within 90 days; (a) Although these refineries are normally shut down on Jan. 1, they are operated at or near capacity during the asphalt paving season; (b) Not included with refineries in the U.S. because they are located in foreign trade zones.

Source: Department of Energy, Energy Information Administration, Petroleum Refineries, Annual, May 22, 1981.

Lubricating Oil and Wax Capacities of U.S. Refineries

(All capacities in b/d as of Jan. 1, 1981)

			Finished Lube Capacity					Wax Capacity	
Company	**Location**	**Crude Capacity**	**C**	**D**	**E**	**F**	**Total**	**G**	**H**
Allied Material Corp.	Stroud, Okla.	7.6	1.0				1.0		0.2
Amoco Oil Co.	Casper, Wyo.	48.0	1.3		0.1		1.4	0.2	0.3
Amoco Oil Co.	Whiting, Ind.	380.0	6.2				6.2	0.6	
Ashland Oil, Inc.	Catlettsburg, Ky.	220.0	5.0				5.0		1.8
Ashland Oil, Inc.	Freedom, Pa.	6.5			1.3		1.3		0.4
Atlantic Richfield Co.	Houston, Tex.	345.0	4.4			2.0	6.4	0.4	0.4
Bayou State Oil Corp.	Hosston, La.	3.0							
Calumet Refining Co.	Burnham, Ill.	0.6				0.6	0.6		
Calumet Refining Co.	Princeton, La.	4.4				3.2	3.2		
Chevron U.S.A., Inc.	Richmond, Calif.	365.0	4.0	2.3			6.3	1.2	1.0
Cit-Con Oil Corp.	Lake Charles, La.		10.0				10.0	1.0	0.8
Continental Oil Co.	Ponca City, Okla.	134.0	2.0				2.0	0.2	
CRA, Inc.	Coffeyville, Kans.	56.5	2.5				2.5	0.2	
Cross Oil & Refining, Inc.	Smackover, Ark.	9.8				2.0	2.0		
Exxon Co., U.S.A.	Baton Rouge, La.	500.0	13.5		2.0		15.5	1.5	
Exxon Co., U.S.A.	Baytown, Tex.	640.0	16.1	8.7		6.7	31.5		1.7
Gulf Oil Co.—U.S.	Port Arthur, Tex.	333.4	6.2	1.4	3.3	2.1	13.0	0.3	0.4
Lubrication Co. of America	Saugus, Calif.			0.5			0.5		
Macmillan Petroleum Inc.	Norphlet, Ark.	4.4				2.2	2.2		
Mobil Oil Corp.	Beaumont, Tex.	325.0	9.1				9.1	1.4	0.3
Mobil Oil Corp.	Paulsboro, N.J.	106.6	7.7				7.7	0.0	0.3
Pennzoil Co.	Falling Rock, W.Va.	5.6			1.4		1.4	0.1	0.2
Pennzoil Co.	Rouseville, Pa.	14.6			3.4		3.4	0.4	0.3
Pennzoil Co., Atlas Processing Co.	Shreveport, La.	45.0				2.2	2.2		
Petrolite Corp.	Barnsdall, Okla.							0.4	
Petrolite Corp., Bareco Div.	Kilgore, Tex.	1.0						0.3	
Phillips Petroleum Co.	Kansas City, Kans.	80.0	2.5				2.5		0.4
Quaker State Oil Ref. Corp.	Emlenton, Pa.							0.7	
Quaker State Oil Ref. Corp.	Farmers Valley, Pa.	6.5	2.5				2.5	0.4	0.5
Quaker State Oil Ref. Corp.	Newell, W.Va.	11.7			3.6		3.6		0.8
Quaker State Oil Ref. Corp.	St. Mary's, W.Va.	4.9	1.6				1.6		0.3
Shell Oil Co.	Deer Park, Tex.	285.0	4.5			3.0	7.5	1.2	
Shell Oil Co.	Martinez, Calif.	104.0		3.5		0.3	3.8		
Shell Oil Co.	Wood River, Ill.	283.0	5.2				5.2		0.7
Sigmor Refining Co.	Three Rivers, Tex.	2.0				1.0	1.0		
Standard Oil Co. (Ohio)	Lima, Ohio	168.0	2.0		0.4		2.4		
Sun Co., Inc.	Marcus Hook, Pa.	165.0	5.5			10.5	16.0	1.0	
Sun Co., Inc.	Tulsa, Okla.	88.5	7.8				7.8	0.9	
Sun Co., Inc.	Yabucoa, Puerto Rico	85.0	6.5				6.8		1.7
Texaco U.S.A.	Port Arthur, Tex.	365.0	12.0	0.6	3.4	4.0	20.0	0.1	1.8
Union Oil Co. of California	Nederland, Tex.	120.0	2.7				2.7	0.0	0.1
Union Oil Co. of California	Rodeo, Calif.	70.0	4.0				4.0	0.6	1.5
Witco Chemical Corp.	Bradford, Pa.	7.5	1.1		0.7		1.8	0.5	
Witco Chemical Corp.	Oildale, Calif.	11.0		2.5	1.8		4.3		
	TOTAL:	5413.1	146.9	19.5	21.4	39.8	227.6	13.6	15.9

Canadian Refineries

Company	Location	Crude Capacity	C	D	E	F	Total	G	H
Gulf Canada Limited	Clarkson, Ontario	79.1	4.5				4.5		1.0
Imperial Oil Enterprises Ltd.	Sarnia, Ontario	126.1	5.3	0.7			6.0	0.3	1.6
Imperial Oil Enterprises Ltd.	Strathcona, Alberta	150.7	2.9				2.9		1.1
International Waxes, Ltd.	Agincourt, Ontario							0.8	
Shell Canada Limited	Montreal East, Quebec	31.0	3.4				3.4		1.0
	TOTAL:	386.9	16.1	0.7	0.0	0.0	16.8	1.1	4.7

Definitions: C—Solvent extracted paraffinic stocks; D—Solvent extracted naphthenic stocks; E—Unextracted paraffinic stocks; F—Unextracted naphthenic stocks; G—Fully refined, crude scale, and micro waxes; H—Semi-finished, slack waxes and petrolatums.

Source: National Petroleum Refiners Assn., Lubricating Oil and Wax Capacities, 1981.

U.S. Refineries and Capacities by Companies

(In Descending Order as of Jan. 1, 1981)

Companies controlling more than 100,000 b/d of crude oil capacity: **No. of companies: 31; No. of refineries: 137; Total capacity: 15,418,712 b/d.**

Company	b/d
Exxon Corp.	
Exxon Co. U.S.A.	
Baytown, TX	640,000
Baton Rouge, LA	500,000
Linden, NJ	290,000
Benicia, CA	102,000
Billings, MT	45,000
Total	1,577,000
Standard Oil Co. of California	
Chevron U.S.A.	
El Segundo, CA	405,000
Richmond, CA	365,000
Pascagoula, MS	280,000
Perth Amboy, NJ	168,000
El Paso, TX	76,000
Honolulu, HI	46,000
Salt Lake, UT	45,000
Bakersfield, CA	26,000
Kenai, AK	22,000
Willbridge, OR	15,000
Baltimore, MD	14,200
Richmond Beach, WA	5,500
Total	1,469,700
Standard Oil Co. of Indiana	
Amoco Oil Co.	
Texas City, TX	415,000
Whiting, IN	380,000
Wood River, IL	108,000
Sugar Creek, MO	104,000
Mandan, ND	56,000
Yorktown, VA	53,000
Casper, WY	48,000
Salt Lake City, UT	39,000
Savannah, GA	24,000
Baltimore, MD	15,000
Total	1,238,000
Shell Oil Co.	
Deer Park, TX	285,000
Wood River, IL	283,000
Norco, LA	230,000
Martinez, CA	104,000
Wilmington, CA	93,000
Anacortes, WA	91,000
Odessa, TX	32,000
Gallup, NM	18,000
Total	1,136,000
Texaco Inc.	
Port Arthur, TX	365,000
Convent, LA	140,000
Westville, NJ	90,000
Lawrenceville, IL	84,000
Anacortes, WA	78,000
Wilmington, CA	75,000
Lockport, IL	72,000
West Tulsa, OK	50,000
Port Neches, TX	47,000
Casper, WY	21,000
Amarillo, TX	20,000
El Paso, TX	17,000
Total	1,059,000
Gulf Oil Corp.	
Gulf Oil Co. U.S.	
Port Arthur, TX	335,800
Philadelphia, PA	206,300
Belle Chasse, LA	195,900
Santa Fe Springs, CA	51,500
Toledo, OH	50,300
Cleves, OH	43,700
Venice, LA	28,700
Total	912,200
Mobil Oil Corp.	
Beaumont, TX	325,000
Joliet, IL	180,000
Torrance, CA	123,500
Paulsboro, NJ	106,600
Ferndale, WA	71,500
Augusta, KS	50,000
Buffalo, NY	43,000
Total	899,600
Atlantic Richfield Co.	
Houston, TX	345,000
Carson, CA	212,000
Philadelphia, PA	185,000
Ferndale, WA	115,000
North Slope, AK	14,200
Total	871,200
Marathon Oil Co.	
Garyville, LA	255,000
Robinson, IL	195,000
Texas City, TX	69,500
Detroit, MI	68,500
Total	588,000
Union Oil Co. of California	
Lemont, IL	151,000
Nederland, TX	120,000
Wilmington, CA	108,000
Rodeo, CA	70,000
Arroyo Grande, CA	41,000
Total	490,000
Ashland Oil, Inc.	
Catlettsburg, KY	213,400
St. Paul Park, MN	67,143
Canton, OH	66,000
Buffalo, NY	64,000
Louisville, KY	25,200
Findlay, OH	20,400
Freedom, PA	6,800
Total	462,943
Standard Oil Co. of Ohio	
Standard Oil Co. of Ohio	
Lima, OH	168,000
Toledo, OH	120,000
BP Oil Corp.	
Marcus Hook, PA	164,000
Total	452,000
Conoco	
West Lake, LA	156,500
Ponca City, OK	134,000
Billings, MT	52,500
Paramount, CA	46,500
Wrenshall, MN	23,500
Egan, LA	15,500
Denver, CO	10,100
Santa Maria, CA	9,500
Total	448,100
Sun Co., Inc.	
Marcus Hook, PA	165,000
Toledo, OH	125,000
Tulsa, OK	88,500
Corpus Christi, TX	57,000
Total	435,500
Phillips Petroleum Co.	
Sweeny, TX	218,000
Borger, TX	97,000
Kansas City, KS	80,000
Woods Cross, UT	24,000
Great Falls, MT	6,000
Total	425,000
Coastal Corp.	
Coastal States Petroleum Co.	
Corpus Christi, TX	185,000
Pacific Refining, Inc.	
Hercules, CA	85,000
Derby Refining Co.	
North Wichita, KS	27,982
Total	297,982
Cities Service Co.	
Lake Charles, LA	291,000
Union Pacific Corp.	
Champlin Petroleum Co.	
Corpus Christi, TX	170,000
Wilmington, CA	60,000
Enid, OK	53,800
Total	283,800
Getty Oil Co.	
Getty Refining & Marketing Co.	
Delaware City, DE	140,000
El Dorado, KS	80,577
Bakersfield, CA	63,000
Total	283,577
Tosco Corp.	
Avon, CA	137,000
Duncan, OK	47,500
El Dorado, AR	47,000
Bakersfield, CA	40,000
Total	271,500
Dow Chemical Co.	
Dow Chemical U.S.A.	
Oyster Creek, TX	190,000
Bay City, MI	20,000
Total	210,000
Kerr-McGee Corp.	
Kerr-McGee Corp.	
Wynnewood, OK	48,630
Dubach, LA	10,780
Southwestern Refining Co.	
Corpus Christi, TX	120,000
Cotton Valley Solvents Co.	
Cotton Valley, LA	8,000
Total	187,410
American Petrofina Co. of Texas	
Port Arthur, TX	90,000
Big Spring, TX	60,000
Total	150,000
Total Petroleum, Inc.	
Ardmore, OK	64,100
Arkansas City, KS	42,500
Alma, MI	40,000
Total	146,600
Murphy Oil Corp.	
Meraux, LA	92,500
Superior, WI	40,000
Total	132,500
Clark Oil & Refining Corp.	
Blue Island, IL	66,500
Hartford, IL	63,600
Total	130,100
Koch Industries, Inc.	
Koch Refining Co.	
Rosemount, MN	127,300
Agway Petroleum Corp.	
Texas City Refining, Inc.	
Texas City, TX	126,700
Energy Cooperative, Inc.	
East Chicago, IN	126,000
Tenneco Oil Co.	
Chalmette, LA	114,000
Crown Central Petroleum Corp.	
Pasadena, TX	100,000

Companies controlling 30,000 b/d to 99,999 b/d of crude oil capacity:

No. of companies: 32: No. of refineries: 45: Total capacity: 1,839,570 b/d.

Company	b/d
Amerada Hess Corp.	
Port Reading, NJ	**68,000
Purvis, MS	30,000
Little America Refining Co.	
Casper, WY	24,500
Sinclair, WY	72,000
Farmland Industries, Inc.	
CRA, Inc.	
Coffeyville, KS	56,500
Phillipsburg, KS	26,400
Scottsbluff, NE	5,600
Earth Resources Co.	
Delta Refining Co.	
Memphis, TN	49,000
Earth Resources Co. of Alaska	
North Pole, AK	38,000
Good Hope Industries, Inc.	
Good Hope Refinery, Inc.	
Good Hope, LA	82,100
Independent Refining Corp.	
Winnie, TX	50,000
Port Neches, TX	30,000
Tesoro Petroleum Corp.	
Tesoro Petroleum Corp.	
Carrizo Springs, TX	26,100
Tesoro-Alaskan Petroleum Corp.	
Kenai, AK	48,500
Diamond Shamrock Corp.	
Sunray, TX	71,700
Texas Eastern Transmission Corp.	
La Gloria Oil & Gas Co.	
Tyler, TX	67,000
Pennzoil Co.	
Pennzoil Co.	
Rouseville, PA	14,600
Atlas Processing Co.	
Shreveport, LA	45,000
Elk Refining Co.	
Falling Rock, WV	5,600
Charter Oil Co.	
Charter International Oil Co.	
Houston, TX	65,000
Husky Oil Co.	
North Salt Lake, UT	25,000
Cheyenne, WY	23,600
Cody, WY	11,500
National Cooperative Refinery Assn.	
McPherson, KS	57,000
Placid Refining Co.	
Port Allen, LA	36,000
Mont Belvieu, TX	12,400
Goldking Refining, Ltd.	
Hill Petroleum Co.	
Krotz Springs, LA	48,000
Seaview Petroleum Co.	
Paulsboro, NJ	44,400
Powerine Oil Co.	
Santa Fe Springs, CA	44,120
Rock Island Refining Corp.	
Indianapolis, IN	43,200
United Refining Co.	
Warren, PA	42,000
Farmers Union Central Exchange	
Laurel, MT	41,650

Company	b/d
Penn Central Corp.	
Edgington Oil Co.	
Long Beach, CA	41,600
Southern Union Co.	
Southern Union Refining Co.	
Lovington, NM	36,100
Monument, NM	5,400
Louisiana Land & Exploration Co.	
Mobile, AL	41,300
Uni International, Inc.	
Uni Refining, Inc.	
Ingleside, TX	39,400
Gulf States Oil & Refining Co.	
Corpus Christi, TX	38,000
Hunt Oil Co.	
Tuscaloosa, AL	35,000
Cirillo Brothers Oil Co.	
Cibro Petroleum Products Inc.	
Albany, NY	33,900
Pride Refining, Inc.	
Abilene, TX	33,000
Sigmor Corp.	
Sigmor Refining Co.	
Three Rivers, TX	32,000
Howell Corp./Quintana Refining Co.	
Nueces Petrochemical Co.	
Corpus Christi, TX	30,000
Sentry Refining, Inc.	
Corpus Christi, TX	30,000

Companies controlling from 10,000 b/d to 29,999 b/d of crude oil capacity:

No. of companies: 71; No. of refineries: 85; Total capacity: 1,270,388 b/d.

Company	b/d
Holly Corp.	
Navajo Refining Co.	
Artesia, NM	29,930
Fletcher Oil & Refining Co.	
Carson, CA	29,500
E-Z Serv Refining, Inc.	
Shallow Water, Kansas	9,500
Winston Refining Co.	
Fort Worth, TX	20,000
Aweco	
Lake Charles Refining Co.	
Lake Charles, LA	28,700
International Processors	
St. Rose, LA	28,600
Manatee Energy Co.	
Port Manatee, FL	28,400
Mobile Bay Refining Co.	
Chickasaw, AL	28,100
Quaker State Oil Refining Corp.	
Newell, WV	11,700
Smethport, PA	6,700
St. Mary's, WV	5,000
Emlenton, PA	3,300
Dorchester Gas Corp.	
Dorchester Refining Co.	
Mount Pleasant, TX	26,500
A Johnson & Co., Inc.	
ATC Petroleum, Inc.	
Newington, NH	13,400
Wilmington, NC	11,900
Marion Corp.	
Theodore, AL	25,000
Boswell Oil Co.	
Mt. Airy Refining Co.	
Mt. Airy, LA	25,000
Suburban Propane Gas Corp.	
Plateau, Inc.	
Bloomfield, NM	16,800
Roosevelt, UT	7,500
Basin Refining Inc.	
Okmulgee, OK	24,000
U.S.A. Petrochem Corp.	
Ventura, CA	24,000
Pester Corp.	
Pester Refining Co.	
El Dorado, KS	22,550
Vermont Gas Systems, Inc.	
Southland Oil Co.	
Sandersville, MS	11,000
Lumberton, MS	5,800
Crupp, MS	5,500
Kern County Refinery, Inc.	
Bakersfield, CA	21,400
Saber Energy, Inc.	
Saber Refining Co.	
Corpus Christi, TX	21,000
West Coast Oil Co.	
Oildale, CA	21,000
Indiana Farm Bureau Cooperative Association	
Mount Vernon, IN	20,600
Ergon Refining, Inc.	
Vicksburg, MS	20,600
Texas Oil & Chemical Co.	
South Hampton Refining Co.	
Silsbee, TX	20,500
North American Petroleum Co.	
LaJet, Inc.	
St. James, LA	20,000
Hudson Oil Co., Inc.	
Hudson Refining Co., Inc.	
Cushing, OK	19,500
McTan Corp.	
Bruin Refining, Inc.	
St. James, LA	19,300
Marlex Petroleum, Inc.	
Marlex Oil & Refining, Inc.	
Los Angeles, CA	19,000
Crystal Oil Co.	
Longview Refining Co.	
Longview, TX	14,000
Berry Petroleum Co.	
Stephens, AR	4,000
Tomlinson Refining, Inc.	
Pioneer Refining, Ltd.	
Nixon, TX	18,000
Witco Chemical Corp.	
Oildale, CA	11,000
Bradford, PA	6,800
Newhall Refining Co., Inc.	
Newhall, CA	17,600
Beacon Oil Co.	
Hanford, CA	17,300
MacMillan Ring-Free Oil Co., Inc.	
Long Beach, CA	12,200
Norphlet, AR	4,400
Ultramar Co., Ltd.	
Golden Eagle Refining Co., Inc.	
Carson, CA	16,170
Calcasieu Refining, Ltd.	
Lake Charles, LA	16,000

Company	b/d
Gladieux Refinery Inc.	
Fort Wayne, IN	15,500
Demenno Resources	
Compton, CA	15,000
Mid-Continent Systems, Inc.	
Natchez Refining Co.	
Natchez, MS	15,000
World Oil Co.	
Sunland Refining Corp.	
Fresno, CA	15,000
Oklahoma Refining Co.	
Cyril, OK	14,880
Giant Industries Inc.	
Farmington, NM	13,500
Gary Energy Co.	
Gary Refining Co.	
Fruita, CO	13,100
Seminole Oil Co.	
Seminole Refining, Inc.	
St. Marks, FL	13,000
Friendswood Refining Co.	
Friendswood, TX	12,500
Western Refining Co.	
Woods Cross, VT	12,500
Petraco-Valley Oil & Refining Co.	
Brownsville, TX	12,300
Thagard Oil Co.	
Lunday-Thagard Oil Co.	
South Gate, CA	12,000
Monsanto Co.	
Texas City, TX	12,000
San Joaquin Refining Co.	
Oildale, CA	12,000
Time Oil Co.	
U.S. Oil & Refining Co.	
Tacoma, WA	12,000
Vedette Energy, Inc.	
Gulf Energy Refining Corp.	
Brownsville, TX	10,000
Val Verde International	
Brownsville, TX	2,000
Kalama Chemical, Inc.	
Sound Refining, Inc.	
Tacoma, WA	11,900
T & S Refining, Inc.	
Jennings, LA	11,500
Texas American Oil, Inc.	
Texas American Petrochemical, Inc.	
West Branch, MI	11,500
Copano Refining Co.	
Ingleside, TX	11,100
Marley	
ECO Petroleum, Inc.	
Long Beach, CA	11,000
Central Louisiana Energy	
Slapco	
Mermentau, LA	11,000
Hermes Products	
Wyoming Refining Co.	
Newcastle, WY	10,500
Tipperary Corp.	
Tipperary Refining Co.	
Ingleside, TX	10,400
Flying J, Inc.	
Cut Bank, MO	5,600
Williston, ND	4,658
Coastal Petroleum Co.	
Paloma, CA	10,200
Sabre Refining, Inc.	
Bakersfield, CA	10,000
Sierra Anchor/Sierra Energy Association	
Anchor Refining Co., Inc.	
McKittrick, CA	10,000
Shepard Oil, Inc.	
Jennings, LA	10,000
Clinton Manges	
Palestine, TX	10,000
Burlington Northern, Inc.	
Glacier Park Co.	
Osage, WY	10,000
Carbonit Refinery, Inc.	
Hearne, TX	10,000
Mitchell Energy & Development	
Liquid Energy Corp.	
Bridgeport, TX	10,000
Tonkawa Refining Co.	
Arnett, OK	10,000
Coral Petroleum Inc.	
Cordova, AL	10,000
Caribou-Four Corners Oil Co.	
Woods Cross, UT	7,500
Farmington, NM	2,500

Companies controlling 2,500 b/d to 9,999 b/d of crude oil capacity:
No. of companies: 39; No. of refineries 42; Total Capacity: 229,850 b/d.

Company	b/d
Howell Corp.	
Howell Hydrocarbons, Inc.	
San Antonio, TX	9,900
Moore & Munger Inc.	
Cross Oil & Refining Co. of Arkansas	
Smackover, AR	9,700
Lakeside Refining Co.	
Kalamazoo, MI	5,600
Crystal Refining Co.	
Carson City, MI	3,000
Southern Independent Oil & Refining	
Laketon Asphalt Refining Co.	
Laketon, IN	8,500
Thriftway Co.	
Bloomfield, NM	6,100
Graham, TX	2,400
Canal Refining Co.	
Church Point, LA	8,000
Adobe Oil & Gas Co.	
Wickett Refining Co.	
Wickett, TX	8,000
Vicksburg Refining, Inc.	
Vicksburg, MS	7,900
Allied Materials Corp.	
Stroud, OK	7,600
Industrial Fuel & Asphalt Co.	
Industrial Fuel & Asphalt of Indiana	
Hammond, IN	7,600
Mallard Resources	
Gueydan, LA	7,400
Quad Refining Corp.	
Bakersfield, CA	7,000
Quitman Refining Co.	
Quitman, TX	6,600
Claiborne Gasoline Co.	
Lisbon, LA	6,500
Morrison Petroleum Co.	
Woods Cross, UT	6,500
Arizona Fuels Corp.	
Fredonia, AZ	6,000
Road Oil Sales, Inc.	
Bakersfield, CA	6,000
Glenrock Refinery, Inc.	
Glenrock, WY	6,000
Huntway Refining Co.	
Wilmington, CA	5,500
Sooner Refining Co.	
Darrow, LA	5,400
Bayou State Oil Corp.	
Hosston, LA	5,000
Evangeline Refining Co., Inc.	
Jennings, LA	5,000
Indiana Refining, Inc.	
Princeton, IN	5,000
Northland Oil & Refining Co.	
Dickinson, ND	5,000
Somerset Refinery, Inc.	
Somerset, KY	5,000
Texas Armada Refining Co.	
TARCO	
Euless, TX	5,000
Warrior Asphalt Co. of Alabama	
Holt, AL	5,000
Young Refining Corp.	
Douglasville, GA	5,000
Kenco Refining, Inc.	
Wolf Point, MO	4,700
Gibson Oil & Refining Co., Inc.	
Bakersfield, CA	4,600
Nevada Refining Co.	
Tonopah, NV	4,500
Funding Systems Refining Corp.	
Adobe Refining Co.	
La Blanca, TX	4,500
Kentucky Oil & Refining Co.	
Betsy Lane, KY	3,000
Troy, IN	1,500
Oxnard Refinery	
Oxnard, CA	4,000
Port Petroleum	
Stonewall, LA	3,600
Southwest Petrochemical	
Rancho Refining Co., Inc.	
Donna, TX	3,500
Eddy Refining Co.	
Houston, TX	3,250
Mid-America Refining Co., Inc.	
Chanute, KS	3,000
Bronco Refining Co.	
Houston, TX	2,500

Companies controlling from 190 b/d to 2,499 b/d of crude oil capacity:
No. of companies: 16; No. of refineries: 16; Total capacity: 22,000 b/d. *(Names on request.)*

RECAPITULATION:

No. of companies: 189; No. of refineries: 324; Total capacity: 18,620,520 b/d.

Working Storage Capacity at U.S. Refineries 1980*

(Add 000 bbl.)

		Gasoline							
P.A.D. Districts	**Crude Oil**	**Finished Leaded**	**Finished Unleaded**	**Blending Components**	**Total**	**Middle Distillates**	**Residual Oils**	**Total Products (a)**	**Total Crude Oil and Products**
P.A.D. District I									
Delaware, Maryland	3,032	542	342	1,089	1,973	1,339	274	8,282	11,314
Florida, Georgia, North Carolina, Virginia	3,162	296	368	537	1,201	1,085	1,232	4,346	7,508
New Jersey	9,743	1,378	1,729	3,520	6,627	7,462	3,369	21,337	31,080
New York, New Hampshire	1,830	219	217	292	728	1,160	1,206	4,147	5,977
Pennsylvania	10,058	3,602	2,504	1,014	7,120	5,771	3,607	24,218	34,276
West Virginia	286	93	56	0	149	115	57	745	1,031
Total District I	**28,111**	**6,130**	**5,216**	**6,452**	**17,798**	**16,932**	**9,745**	**63,075**	**91,186**
P.A.D. District II									
Illinois	7,540	3,610	2,582	5,723	11,915	7,050	2,367	31,631	39,171
Indiana	2,313	1,132	1,033	2,973	5,138	3,241	2,872	20,345	22,658
Kansas	3,387	2,752	1,009	2,193	5,954	3,794	1,264	17,953	21,340
Kentucky, Tennessee	2,111	932	477	287	1,696	1,194	821	5,406	7,517
Michigan	3,128	674	466	412	1,552	1,868	1,111	8,310	11,438
Minnesota, Wisconsin	3,257	2,293	795	161	3,249	2,103	1,205	9,774	13,031
North Dakota	375	337	253	617	1,207	798	125	2,384	2,759
Ohio	3,261	2,602	1,851	2,144	6,597	3,208	720	14,637	17,898
Oklahoma	4,057	3,747	1,674	2,017	7,438	5,557	1,088	17,885	21,942
Total District II	**29,429**	**18,079**	**10,140**	**16,527**	**44,746**	**28,813**	**11,573**	**128,325**	**157,754**
P.A.D. District III									
Alabama	1,170	178	115	770	1,063	865	1,360	4,313	5,483
Arkansas	1,264	104	149	138	391	661	90	1,924	3,188
Louisiana	23,515	3,987	4,082	9,917	17,986	13,569	6,180	63,640	87,155
Mississippi	3,754	1,444	703	1,667	3,814	2,196	945	8,815	12,569
New Mexico	1,023	481	226	276	983	574	488	2,737	3,760
Texas	49,195	12,687	10,233	21,370	44,290	26,822	16,818	172,754	221,949
Total District III	**79,921**	**18,881**	**15,508**	**34,138**	**68,527**	**44,687**	**25,881**	**254,183**	**334,104**
P.A.D. District IV									
Colorado	440	591	217	348	1,156	375	421	2,717	3,157
Montana	1,558	1,277	527	1,203	3,007	1,467	274	6,375	7,933
Utah	1,235	717	334	1,087	2,138	1,116	498	5,254	6,489
Wyoming	1,729	1,532	623	976	3,131	1,508	811	8,505	10,234
Total District IV	**4,962**	**4,117**	**1,701**	**3,614**	**9,432**	**4,466**	**2,004**	**22,851**	**27,813**
P.A.D. District V									
California	30,566	5,204	6,043	10,110	21,357	7,934	17,030	71,241	101,807
Washington	7,852	1,321	1,085	1,305	3,711	1,091	984	9,761	17,613
Other States	2,842	263	114	661	1,038	843	1,487	4,737	7,579
Total District V	**41,260**	**6,788**	**7,242**	**12,076**	**26,106**	**9,868**	**19,501**	**85,739**	**126,999**
United States, Total	**183,683**	**53,995**	**39,807**	**72,807**	**166,609**	**104,766**	**68,704**	**554,173**	**737,856**

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*As of Jan. 1, 1981; (a) total products includes asphalt, road oil, lube oil, propane, butane, jet fuel and miscellaneous items.

U.S. Primary Distribution System

(Add 000,000 bbl.)

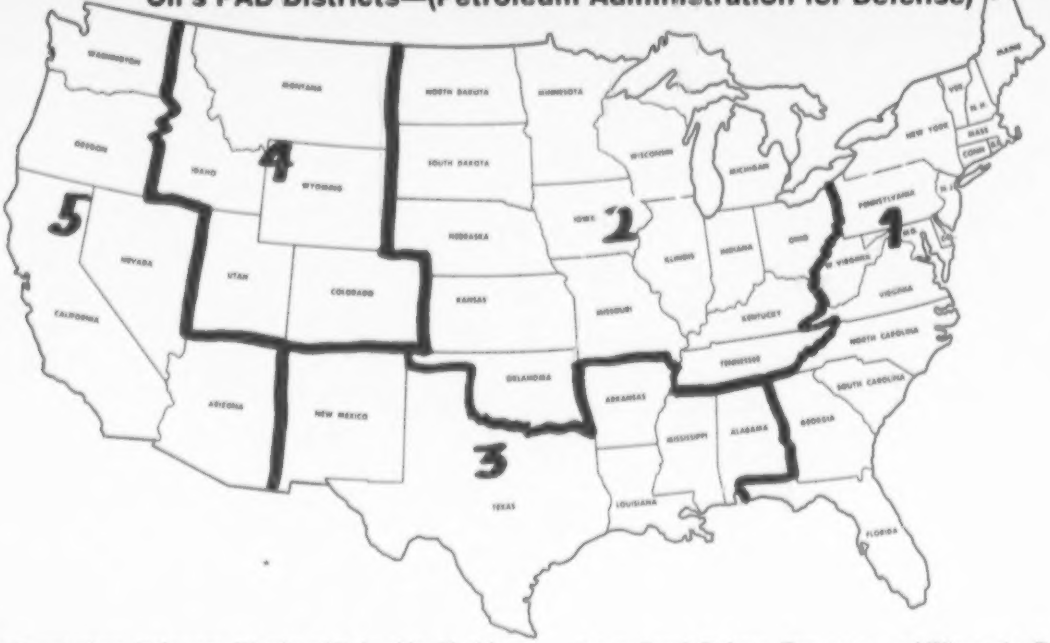
		Minimum Operating Inventory	
	Storage Tank Capacity (9/30/78)	**Industry Estimate**	**Dept. of Energy Estimate**
Crude Oil	474	290	294
Gasoline	443	210	204
Kerosine	90	35	— (b)
Distillate	368	125	117
Residual	163	60	60
Total	**1,517 (a)**	**720 (c)**	**710**

(a) Includes tankage under construction; (b) Includes assumed value of 35-million bbl. for kerosine to equalize industry estimate; (c) Does not include minimum operating inventory of other feedstocks and products.

Oil and Gas Transportation Facilities

	Number of	**Total Capacity**
Gas Pipelines (as of 12/31/77)	331,976 miles	NA
Petroleum Pipelines (as of 12/31/78)	227,060 miles	NA
Tank Cars (as of 7/15/79)	107,552	2,175.5 MMgal.
Tank Trucks (as of 12/31/78)	50,010	364.4 MMgal.
Tank Barges (as of July, 1979)	3,971	71.4 MMbbl.
Tank Ships (as of July, 1979)	352	97.0 MMbbl.

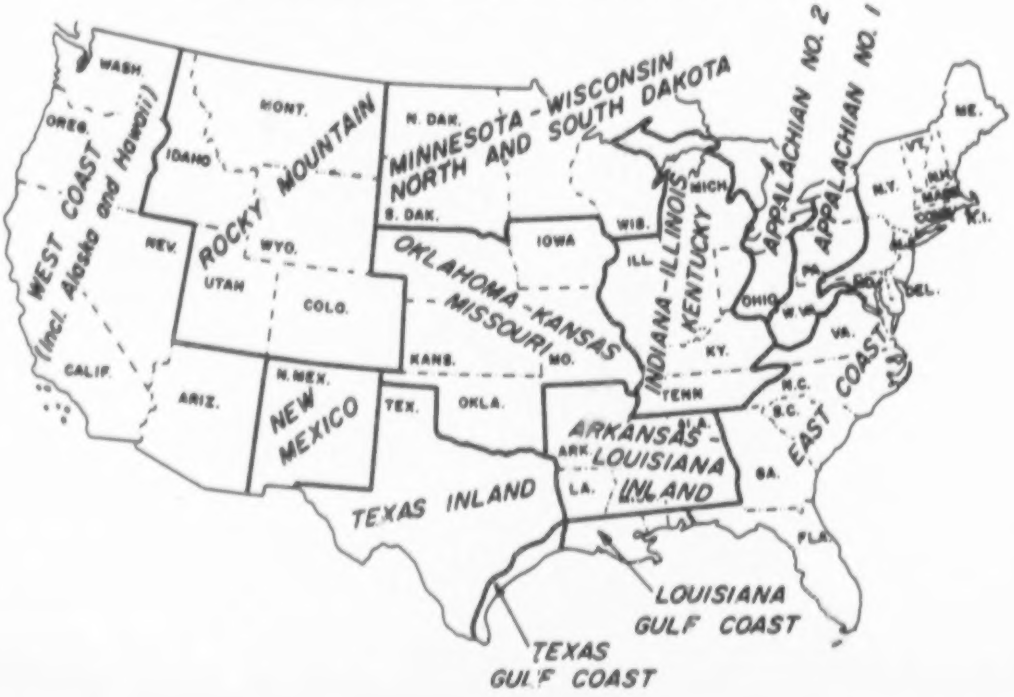
Oil's PAD Districts—(Petroleum Administration for Defense)


1
2
3
4
5
WASHINGTON
OREGON
CALIFORNIA
IDAHO
NEVADA
MONTANA
WYOMING
UTAH
COLORADO
ARIZONA
NEW MEXICO
NORTH DAKOTA
SOUTH DAKOTA
NEBRASKA
KANSAS
OKLAHOMA
TEXAS
MINNESOTA
IOWA
MISSOURI
ARKANSAS
LOUISIANA
WISCONSIN
ILLINOIS
MICHIGAN
INDIANA
OHIO
KENTUCKY
TENNESSEE
MISSISSIPPI
ALABAMA
GEORGIA
FLORIDA
SOUTH CAROLINA
NORTH CAROLINA
VIRGINIA
W. VIRGINIA
PENNSYLVANIA
NEW YORK
MAINE
VT.
N.H.
MASS.
CONN.
R.I.
N.J.
MD.

PAD 1: Connecticut, Delaware, District of Columbia, Florida, Georgia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, North Carolina, Pennsylvania, Rhode Island, South Carolina, Vermont, Virginia, and West Virginia; **PAD 2:** Illinois, Indiana, Iowa, Kansas, Kentucky, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, Oklahoma, South Dakota, Tennessee, and Wisconsin; **PAD 3:** Alabama, Arkansas, Louisiana, Mississippi, New Mexico, and Texas; **PAD 4:** Colorado, Idaho, Montana, Utah, and Wyoming; **PAD 5:** Alaska, Arizona, California, Hawaii, Nevada, Oregon, and Washington.

Source: Energy Data Reports, Department of Energy.

BUREAU OF MINES REFINING DISTRICTS


WASH.
OREG.
WEST COAST (Incl. Alaska and Hawaii)
CALIF.
NEV.
IDAHO
MONT.
ROCKY MOUNTAIN
WYO.
UTAH
COLO.
ARIZ.
N. MEX.
NEW MEXICO
N. DAK.
S. DAK.
MINNESOTA - WISCONSIN NORTH AND SOUTH DAKOTA
IOWA
WIS.
OKLAHOMA - KANSAS - MISSOURI
KANS.
MO.
OKLA.
TEX.
TEXAS INLAND
ILL.
INDIANA - ILLINOIS - KENTUCKY
MICH.
KY.
TENN
ARKANSAS - LOUISIANA INLAND
ARK.
LA.
ALA.
MISS.
APPALACHIAN NO. 2
APPALACHIAN NO. 1
OHIO
W.V.
PA.
N.Y.
VT.
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ME.
MASS.
CONN.
R.I.
N.J.
DEL.
MD.
VA.
N.C.
S.C.
GA.
FLA.
EAST COAST
LOUISIANA GULF COAST
TEXAS GULF COAST